

December 20, 2013

Ms. Rachelle Thompson  
United States Environmental Protection Agency  
Region 9  
75 Hawthorne Street  
San Francisco, California 94105

RE: 2012-2013 Annual Report for United Heckathorn Superfund Site  
Upland Capping System  
Richmond, California

Dear Ms. Thompson:

Enclosed please find the 2012-2013 Annual Report for the United Heckathorn Superfund Site Upland Capping System presenting inspection, monitoring, and maintenance activities performed on the upland capping and drainage system at the United Heckathorn Superfund Site located at 402 Wright Avenue, Richmond, California. This report was prepared in accordance with the *Revised Draft Operations and Maintenance Plan, Upland Capping System Former United Heckathorn Site*.

Please feel free to contact me if you have any questions or concerns with the attached report.

Sincerely,



Gary Levin  
Chief Executive Officer  
(510) 307-4091

Attachment: 2012-2013 Annual Report for United Heckathorn Superfund Site Upland Capping System



**Weiss Associates**

*Environmental Science, Engineering, and Management*

2200 Powell Street, Suite 925, Emeryville, CA 94608-1879

Fax: 510-547-5043 Phone: 510-450-6000

## **2012-2013 ANNUAL REPORT**

**for**

**United Heckathorn Superfund Site  
Upland Capping System  
Richmond, California**

*prepared for*

**Levin Richmond Terminal Corporation**

402 Wright Avenue  
Richmond, California 94804

*prepared by*

**Weiss Associates**

2200 Powell Street, Suite 925  
Emeryville, California 94608

December 20, 2013



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Weiss Job No. 426.1966.14

Weiss Associates' work for the Levin Richmond Terminal Corporation was conducted under my supervision. To the best of my knowledge, the data contained herein are true and accurate, are based on what can be reasonably understood as a result of this project, and satisfy the scope of work prescribed by the client for this project. The data, findings, recommendations, specifications or professional opinions were prepared solely for the use of the Levin Richmond Terminal Corporation and its agents, the United States Environmental Protection Agency in accordance with generally accepted professional engineering and geologic practice. We make no other warranty, either expressed or implied, and are not responsible for the interpretation by others of the contents herein.



  
\_\_\_\_\_  
Scott Bourne, PE  
Principal

12/20/13  
\_\_\_\_\_  
Date

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## ACRONYMS AND ABBREVIATIONS

BMP	best management practices
C&T	Curtis & Tompkins Laboratories
City	City of Richmond
DDE	dichlorodiphenyldichloroethene
DDT	dichlorodiphenyltrichloroethane
delta-BHC	delta-hexachlorocyclohexane or delta-lindane
Heckathorn site or Site	former United Heckathorn Superfund Site
IGP	<i>General Permit for Storm Water Discharges Associated with Industrial Activities (Industrial General Permit)</i>
LRT	Levin Richmond Terminal
LRTC	Levin Richmond Terminal Corporation
Main Terminal	Levin Richmond Main Terminal
msl	mean sea level
NPDES	National Pollutant Discharge Elimination System
O&M	operations and maintenance
O&M Plan	<i>Revised Draft Operations and Maintenance Plan, Upland Capping System, Former United Heckathorn Site</i>
SWMP	Storm Water Monitoring Program
SWRCB	State Water Resources Control Board
Third-Five Year Review	<i>Third Five-Year Review Report for United Heckathorn Superfund Site, Richmond, California</i>
Torrent	Torrent Laboratory
µg/L	micrograms per liter
USEPA	United States Environmental Protection Agency
Weiss	Weiss Associates

## 1. INTRODUCTION

This 2012-2013 Annual Report was prepared to describe the inspection, monitoring, and maintenance activities performed on the upland capping and drainage system at the United Heckathorn Superfund Site (Heckathorn site or Site) located in the Richmond Harbor near the intersection of the Santa Fe Channel and Inner Harbor Channel (Figure 1). The Site is part of the Levin Richmond Terminal (LRT) and this report has been prepared by Weiss Associates (Weiss) under contract with the Levin Richmond Terminal Corporation (LRTC).

### 1.1 Background

From 1947 through 1966, the Heckathorn site was used for processing, packaging, and shipping of pesticides including aldrin, dieldrin, dichlorodiphenyltrichloroethane (DDT), and endrin. In 1994, the United States Environmental Protection Agency (USEPA) adopted a Record of Decision for the Site which limits use of the property and required LRTC to design, construct, and maintain a concrete cap to prevent erosion of upland soils (USEPA, 1994). In 1996, LRTC entered into a Consent Decree with USEPA, which outlined LRTC's responsibilities for long-term management of the upland capping system located on the northern half of the Levin Richmond Main Terminal (Main Terminal; United States District Court, 1996). LRTC performs operations and maintenance activities in accordance with the *Revised Draft Operations and Maintenance Plan, Upland Capping System, Former United Heckathorn Site* (O&M Plan; PES, 1999).

This report documents the results of activities performed in accordance with the O&M Plan for the period of July 1, 2012 to June 30, 2013.

### 1.2 Upland Cap Remediation Objective

The goal of the upland cap at the Heckathorn site is to reduce the potential for future pesticide contamination in the marine environment by containing contaminated soils and preventing erosion or soil loss from the Site caused by wind, rain, or facility activities.

### 1.3 USEPA Recommendations from the Third Five-Year Review

In a memorandum dated July 22, 2011, included in the *Third Five-Year Review Report for United Heckathorn Superfund Site, Richmond, California* (Third Five-Year Review), the USEPA's contractor recommended that the additional best management practices (BMPs) listed below for the upland cap (USEPA, 2011, Appendix B) be incorporated into the O&M Plan:

- *Crack monitoring*: Perform annual inspections of the cap under the oversight of a registered engineer and document cracks, maintenance, and repairs on a base-line map which is updated annually.

- *Settlement monitoring:* Conduct a periodic topographic survey of the cap surface to document that the cap is not undergoing significant differential settlement which could ultimately impact its integrity; compare subsequent surveys with a baseline survey to identify areas of differential movement.
- *Sediment in storm drain interceptors:* Collect, quantify, and analyze accumulated sediment (using USEPA Method 8081) that is removed from storm drain interceptors within the cap area; include this information in the Annual Report.
- *Integrity of underground drainage systems:* Conduct periodic underground videoscoping or other equivalent methods to verify the integrity of the underground stormwater collection and discharge structures that underlie the Site, including the portion of the storm drain structure that underlies the cap.

#### **1.4 Contents of this Report**

The following sections describe the results of activities performed to maintain the upland cap, including:

- Annual cap inspection;
- Storm water monitoring;
- Corrective actions implemented in 2012-2013; and
- Proposed corrective actions for 2013-2014.

A conclusion with Weiss's opinion as to the overall condition and effectiveness of the cap in meeting the upland cap remediation objective is also included.

## **2. SITE DESCRIPTION**

LRTC loads and unloads approximately 1.5 million tons per year of dry bulk cargo, including, but not limited to: coal, scrap metal, and petroleum coke from vessels, railcars, and trucks. Three parcels owned and operated by LRTC are referred to as the LRT: (1) the Main Terminal at 402 Wright Avenue; (2) South Parr Yard at 790 Wright Avenue; and (3) North Parr Yard at 799 Wright Avenue (Figure 2). The Heckathorn site includes the northern five acres of the Main Terminal (Figure 2), known as the Upland Area.

### **2.1 Upland Area Description and Current Use**

The Upland Area is bounded by Cutting Boulevard and railroad tracks to the north; South Fourth Street, Wright Avenue, and Sims Metal Management to the east; the Santa Fe Channel to the south; and the Lauritzen Canal, Manson Construction Company, and an unoccupied industrial property, to the west. The majority of the Upland Area is relatively flat with surface elevations of approximately nine feet above mean sea level (msl). The area of the Upland Area north of the Lauritzen Canal was raised to approximately 15 feet above msl.

The Upland Area is used primarily for rail operations, stockpiling dry bulk product and temporary equipment storage.

### **2.2 Nearby/On-site Water Bodies**

In addition to the Upland Area, the Heckathorn site includes a marine area which includes sediments in the Lauritzen Canal, Parr Canal, Santa Fe Channel, and the Richmond Inner Harbor. The Lauritzen Canal receives urban and industrial storm water runoff from the City of Richmond's (City's) 30-inch diameter storm water outfall at the north end of the canal. The USEPA has installed a gate on the 30-inch outfall to reduce salt water flow from the Lauritzen Canal into the City's storm water system. LRTC storm water systems are not connected to the municipal system at this discharge location and discharge directly to the Lauritzen Canal.

The Parr Canal is located west of the South Parr Yard (Figure 2). The Parr Canal receives urban and industrial storm water runoff from the City through two box culverts (one 6-foot and one 8-foot) located at the north end of the canal. These culverts are connected to the City's upgradient storm sewer mains which follow South Eighth Street. The South Parr Yard and North Parr Yard storm water systems discharge to these storm water mains.

The Santa Fe Channel at the southern boundary of the Main Terminal and the South Parr Yard marks the northern reach of the Richmond Inner Harbor. Storm water is discharged to the Santa Fe Channel from a variety of industrial operations along its length and from the City's storm water collection system.

## **2.3 Upland Area Cap**

Construction of the concrete cap at the Upland Area began in July 1998 and was completed in July 1999. Installation of the cap consisted of three steps: (1) site grading to promote surface runoff to collection points; (2) installation of a drainage system to collect surface runoff, including BMPs for storm water pollution prevention; and (3) construction of a reinforced concrete cap in the majority of the five-acre area used for material stockpiling and construction of a geotextile fabric and gravel cap in the railroad track area. The concrete and gravel/geotextile cap areas were designed to protect against erosion of contaminated soils and subsequent flow into the channel associated with surface water runoff (USEPA, 2011).

## **2.4 Storm Water Collection System**

The Upland Area storm water collection system was installed in 1998 and is part of the larger storm water collection system at the LRT (Figure 3). The facility is paved with asphalt and concrete and is graded to direct surface water runoff via sheet flow or shallow swales to drop inlets. The drop inlets drain to below-grade interceptors via underground pipe. Five storm water interceptors, SW-3 through SW-7, are located within the Upland Area storm water drainage system and receive storm water runoff from catchment areas of the same name (i.e., areas SW-3 through SW-7). The wooden pier deck that extends over open water is not connected to the storm water drainage system. The upland capping system's storm water catchment areas are described in detail below.

Storm water interceptors SW-3 through SW-7 were constructed with compartments and steel baffles to allow the settling of sediments onto the chamber floor and separation of oil/grease and floatables, thereby decreasing the outflow of these pollutants into the Lauritzen Channel. Interceptors SW-3 through SW-7 were constructed with a capacity to provide a five-minute retention time during a 10-year, 24-hour storm event (PES, 1999). Interceptors SW-3 through SW-7 are now equipped with normally closed gate valves, which are opened to enable discharge to the Lauritzen Channel.

In 2009, interceptor SW-3 was modified to include two new pumps. In 2012, valves and piping were installed in order to discharge to a 20,000-gallon nominal capacity rectangular tank for additional sediment removal. Storm water discharged to the tanks and was allowed to settle before it was reused on-site for dust suppression and surface cleaning, or before it was tested and discharged to the sanitary sewer under an Industrial Storm Water, Wastewater Discharge Permit from the City. Beginning in the 2013–2014 storm water season, storm water discharges to the municipal sanitary sewer will no longer be permitted. A second 20,000 gallon sedimentation tank has been installed at interceptor SW-3 for the 2013-2014 storm water season.

### 3. ANNUAL SITE INSPECTION

This section describes the findings from the upland capping system inspection conducted during the 2012-2013 reporting year. Greg Hulburd, P.E., of Weiss performed an annual inspection of the upland capping system on October 31, 2013, in accordance with the O&M Plan (PES, 1999). The inspection included visual observations of the concrete cap, gravel cover, and drainage system throughout the extent of the Upland Area. The findings of the inspection of the Upland Area storm water drainage system are included on the Upland Capping System Inspection Form (Appendix A); photographs taken during the inspection are included in Appendix B.

#### 3.1 Concrete Cap Inspection

Visual observations of the concrete cap concentrated on cracks, joints, high-loading areas, and penetrations looking for signs of deterioration and exposure of the underlying subgrade. Any such defect was considered for its potential to compromise the ability of the cap to prevent wind and water erosion and lead to migration of pesticide-impacted sediments into the adjacent Lauritzen Channel, or to expose Site workers. Particular emphasis was placed on re-examining areas with cracks and potential settlement as identified in the Third Five-Year Review (USEPA, 2011). Minor cracks typical of those found on paved concrete and asphalt surfaces due to weathering and expansion/contraction were observed in the cap. Below is a summary of observations from the concrete cap inspection.

- SW-3 Area – Cracks and wide concrete seams were observed northwest of the rail entry gate, along the western alley near drain inlet 3-DI-11A, and in the secondary storage area; heavier networks of cracks were observed south of interceptor SW-3 approaching the southern end of the upland capping system.
- SW-4 Area – A gap was observed in the asphalt-concrete interface along the rail line running northeast toward the center of the Main Terminal.
- SW-5 Area – Minor cracks were observed in the concrete cap east of interceptor SW-5; in addition, concrete joints at the 4<sup>th</sup> Street truck entry show signs of deterioration.
- SW-6 Area – Minor cracks were noted south of interceptor SW-6; some cracks showed signs of previous sealing.
- SW-7 Area – Minor cracks were observed on the north side of the cap extending from the top of the concrete knoll north toward drain inlet 7-DI-17, on the west side of the concrete knoll extending down the concrete cap slope, and on the top of the concrete cap knoll.

Figure 3 is a baseline map documenting locations of cracks and gaps as shown in inspection photographs in Appendix B and described above. No evidence of differential settling or vertical displacement was observed. In addition, no evidence of cracks, gaps, significant cap deterioration, or other material breach with potential for exposure of the underlying subgrade was observed. Weiss recommends that LRTC continue to regularly inspect the concrete cap, perform corrective actions as detailed in Section 6 and Table 1, and update the baseline map (Figure 3) to show any repairs.

### **3.2 Gravel Cover Inspection**

Visual observations of the gravel cover concentrated on gravel- and rip-rap-covered areas of the upland capping system. Particular emphasis was placed on re-examining an area with potential settlement near interceptor SW-6 as identified in the Third Five-Year Review (USEPA, 2011). A geotextile membrane underlies the gravel cover, but was not visually observed in any of the areas inspected. Below is a summary of observations from the concrete cap inspection.

- SW-5 Area – Evidence of animal burrowing was observed in the gravel cover area located south of interceptor SW-5; in addition, an area of the gravel cover to the north of interceptor SW-5 requires additional gravel.

No evidence of differential settling or vertical displacement was observed. Overall, the gravel cover was found to be in good condition and functioning properly with no potential for exposure of the underlying subgrade observed. Weiss recommends that LRTC continue to regularly inspect the gravel cover and perform corrective actions as detailed in Section 6 and Table 1.

### **3.3 Storm Water Collection System Inspection**

Visual observations were conducted at each of the drain inlets and five storm water interceptors in the SW-3, SW-4, SW-5, SW-6, and SW-7 catchment areas. LRTC cleaned the interceptors during the first two weeks of October 2013, prior to the October 31, 2013 inspection, in preparation for the storm water season. Below is a summary of observations from the storm water collection system inspection.

- Several of the drain inlets required moderate maintenance including removal of accumulated sediment and debris, and replacement of filter fabrics.

No sediment was observed in drain inlets or storm water interceptors at a depth greater than 18 inches. No structural improvements to the drain inlets were found to be necessary during the inspection. The interceptors were found to be in working order with no corrective actions required. Weiss recommends that LRTC continue to regularly inspect the collection system and implement BMPs in accordance with the current Storm Water Pollution Prevention Plan (Weiss, 2013).



## 4. STORM WATER MONITORING

The O&M Plan (PES, 1999) requires storm water sampling to assess the effectiveness of the upland capping system. Storm water discharges associated with industrial activities at the LRT are subject to the State Water Resources Control Board (SWRCB) Water Quality Order 97-03-DWQ for National Pollutant Discharge Elimination System (NPDES) General Permit No. CAS000001 (*Waste Discharge Requirements for Discharges of Storm Water Associated with Industrial Activities excluding Construction Activities*), also referred to as the Storm Water Industrial General Permit (IGP). As such, the O&M Plan expands the storm water monitoring requirements to include sampling for pesticides by USEPA Method 8080 in storm water discharges originating from the Upland Area (i.e., interceptors SW-3 through SW-7). Specifically, the O&M Plan requires samples to be collected at the outlet of each of the five interceptors. LRT maintains a Storm Water Monitoring Program (SWMP; Weiss, 2013) which details monitoring procedures to comply with the IGP and the O&M Plan.

Sample collection is to be performed in conjunction with requirements of the IGP which mandates:

- Sampling during two storm events producing discharges during the wet season (October through May);
- Collecting samples from a storm preceded by at least three days of dry weather; and
- Collecting samples during normal operating hours.

### 4.1 Sampling Results

During the 2012-2013 reporting year, interceptors SW-3 through SW-7 were sampled during more than the required minimum of two storm events per wet season. The interceptors were sampled as follows:

- SW-3 – sampled three times on October 22, November 30, and December 21;
- SW-4 – sampled eight times on October 22, November 17, November 28, November 30, December 5, December 15, December 21, and February 19 (pesticides were not analyzed during the February 19 event);
- SW-5 – sampled six times on October 22, November 17, November 21, November 30, December 5, and December 21;
- SW-6 – sampled three times on November 30, December 5, and December 21; and
- SW-7 – sampled twice on November 30 and December 21.

Some storm water events lasted several days. In order to evaluate the effectiveness of BMPs, select locations were re-sampled during the multi-day events. Thus, discharges sampled on November 21, November 30, and December 5 were not preceded by three working days without a storm water discharge.

Tables 2 and 3 provide the laboratory analytical results of storm water samples collected from the Upland Area drainage system discharges during the 2012-2013 reporting year. Table 2 presents results for pesticides, petroleum hydrocarbons, and volatile organic compounds to satisfy the requirements of both the O&M Plan (pesticides) (PES, 1999) and SWMP (Weiss, 2013). Table 3 presents results for general parameters, metals, and polycyclic aromatic hydrocarbons collected to comply with the SWMP. Original laboratory reports, including applicable chain-of-custody forms, are included as part of the 2012-2013 Annual Storm Water Monitoring Report provided in Appendix C. Note that the laboratory analytical reports include results from other sampling locations (i.e., SW-1, SW-2, SW-11, and SW-12) collected as part of the LRT SWMP for 2012-2013.

This Annual Report focuses on the evaluation of analytical results for pesticides. Pesticides were detected during the October 22, November 28, November 30, and December 21 storm sampling events. No pesticides were detected in storm water samples collected on November 17, November 21, December 5, or December 15.

#### *4.1.1 October 22, 2012 Sample Results*

Storm water samples were collected from Upland Area interceptors SW-3, SW-4, and SW-5 and submitted to McCampbell Analytical in Pittsburg, California. Pesticides were detected in storm water samples collected at each of the three Upland Area interceptors sampled.

- DDT was detected at concentrations ranging from 0.023 micrograms per liter ( $\mu\text{g/L}$ ) at interceptor SW-4 to 0.043  $\mu\text{g/L}$  at interceptor SW5.
- DDE was detected at a concentration of 0.013  $\mu\text{g/L}$  at interceptor SW-5.
- Dieldrin was also detected at interceptor SW-5 at a concentration of 0.019  $\mu\text{g/L}$ .

Split samples were submitted to Curtis & Tompkins Laboratories (C&T) in Berkeley, California for each of the three samples collected from interceptors SW-3, SW-4, and SW-5. The samples were submitted past their holding time compromising the integrity of the resulting data, and thus are not reported in Table 1. No pesticides were detected in the split samples submitted; however, the reporting limits for the split samples exceeded the concentrations detected in the original samples.

#### *4.1.2 November 28, 2012 Sample Results*

A storm water sample was collected from Upland Area interceptor SW-4 and submitted to Torrent Laboratory (Torrent) in Milpitas, California. Trace concentrations of aldrin and endrin were detected at estimated concentrations of 0.081  $\mu\text{g/L}$  and 0.056  $\mu\text{g/L}$ , respectively.

#### *4.1.3 November 30, 2012 Sample Results*

Storm water samples were collected from Upland Area interceptors SW-3, SW-4, SW-5, SW-6, and SW-7 and submitted to Torrent for analysis. 4, 4'-DDT was detected in the sample collected at interceptor SW-6 at a concentration of 0.024  $\mu\text{g/L}$ .

#### *4.1.4 December 21, 2012 Sample Results*

Storm water samples were collected from Upland Area interceptors SW-3, SW-4, SW-5, SW-6, and SW-7 and submitted to C&T for analysis. Delta-hexachlorocyclohexane (delta-BHC or delta-lindane) was detected in the sample collected at interceptor SW-5 at a concentration of 0.07 µg/L.

### **4.2 Quality Assurance/Quality Control**

The O&M Plan (PES, 1999) requires at least one duplicate sample be collected per storm sampling event. During the 2012-2013 reporting year, duplicate (split) samples were submitted during only one sampling event on October 22, 2012, but the resulting data are not usable (see Section 4.1.1). For the upcoming storm water season, one duplicate sample will be collected randomly from one of the five sampling locations during each storm event.

No other significant data quality issues were reported through the data validation process.

### **4.3 Assessment of Storm Water Sampling Results**

The pesticides detected in storm water samples collected during the 2012-2013 storm water season were consistent with historical concentrations of pesticides detected in interceptor storm water discharge samples. The remediation goals set for surface water at the Heckathorn site in the Record of Decision are 0.00059 µg/L and 0.00014 µg/L, for total DDT and dieldrin, respectively; detected concentrations of total DDT and dieldrin exceed those values.

Weiss recommends that LRTC continue storm water monitoring in order to verify that the cap is effectively preventing the release of soils. Attention must be paid during future inspections for potential transport mechanisms that could be introducing pesticides to storm water interceptors and drain inlets, especially at interceptor SW-6 which has had the most frequent detections of pesticides in its storm water discharges, and interceptor SW-4 where detections were observed for the first time based on data from the 2009-2010 years onward (LRTC, 2010; LRTC, 2011; LRTC, 2012). For the next Annual Report, Weiss recommends that LRTC develop trend graphs showing temporary and spatial distribution of detected pesticides for the preceding five years.

## **5. 2012-2013 CORRECTIVE ACTIONS**

This section describes corrective actions including repair and routine O&M of the upland capping system performed during the 2012-2013 reporting year. No maintenance activities involving the disturbance of or excavation into underlying, impacted soil were conducted.

### **5.1 Repair of Concrete Cap**

No major repair involving replacement of portions of the concrete cap was conducted during the 2012-2013 reporting year. Minor maintenance activities included the repair of a section of concrete located east of interceptor SW-4 (Figure 3). A crack in the concrete cap was identified by LRT personnel in the fall of 2013. The section of concrete with the crack was removed and replaced with fresh concrete. In addition, a concrete berm was added to the edge of the concrete cap south of interceptor SW-4 to prevent runoff from the concrete cap toward the rail line in this area (Appendix B; photograph 6). No other maintenance or repair activities were conducted.

### **5.2 Repair of Gravel Cover**

No major repair involving replacement of portions of the gravel cover was conducted during the 2012-2013 reporting year. Minor maintenance activities included the placement of TrackMat™ oil-absorbent filter fabric in the rail lines located in the SW-5 and SW-6 catchment areas. Further, an area of the gravel cover located north of interceptor SW-5 received new gravel. No other maintenance or repair activities were conducted for the gravel cover.

### **5.3 Repair of Drainage System**

No major repairs were made to the storm water drainage system during the 2012-2013 reporting year. Routine maintenance activities included the cleanout of storm water drain inlets and interceptors in accordance with the procedures outlined in the O&M Plan (PES, 1999). This maintenance included the removal of accumulated sediment from drain inlets and interceptors. Accumulated storm water was characterized prior to discharge to the City's sanitary sewer system. Sediment was removed via vacuum trucks and hand shovels and transported to a drying bed located at LRT's South Parr Yard. Dewatered sediment was returned back to the material stockpiles from which originated. No sediment was sent off-site for disposal during the 2012-2013 reporting year.

Modifications to the Upland Area drainage system in the past year included the installation of a 20,000-gallon settling tank at interceptor SW-3 to promote sedimentation prior to discharge to the Lauritzen Channel. In addition, discharge pipes from interceptors SW-3 through SW-6 have had gate valves installed to control or prevent discharge. Interceptor SW-7 had a gate valve installed the previous year. In addition, drain inlet protection BMPs have been maintained and optimized to ensure functionality and to prevent interference with Site operations. Many of the filter fabrics at drain inlets in the Upland Area were replaced with new filter fabrics. The outfall pipes at interceptors SW-4, SW-5, and SW-6 were fitted with filter fabric socks to provide a final stage of filtration immediately prior to discharge into the Lauritzen Channel.

## **6. PROPOSED SITE WORK FOR 2013-2014**

During the 2013-2014 reporting year, O&M activities will continue in accordance with the O&M Plan (PES, 1999). Storm water discharge samples will be collected during at least two storm events from interceptors SW-3 through SW-7. Only discharging interceptors will be sampled; therefore, not every interceptor will necessarily be sampled twice in the storm water season. An annual inspection of the concrete cap and gravel cover in the Upland Area will be performed in the early summer of 2014. Informal inspections of the upland capping system, including the drainage system, will continue on a more frequent basis as part of SWMP compliance activities and daily operations. Any repairs to the cap, if required, will be documented and reported in a memorandum to the USEPA and the California Department of Toxic Substances Control.

Minor maintenance activities recommended after completion of the annual upland capping system inspection are listed on the inspection form provided in Appendix A. Proposed Site work for 2013-2014 is presented in Table 1.

## 7. CONCLUSIONS

The annual upland capping system inspection found that the cap is in overall good condition and effectively functions to prevent wind and water erosion of the underlying soil. At this time, no major repair work is considered necessary for the upland capping system. However, continued monitoring and maintenance is required. Minor maintenance recommendations include:

- sealing cracks, joints and seams identified during the inspection with an epoxy sealant;
- surface pavement repair;
- deterring animals from burrowing in portions of the gravel cover;
- the addition of gravel and filter fabrics in gravel cover areas;
- regular cleanout of the storm water drainage system;
- embankment stabilization; and
- proper implementation of BMPs identified in the LRT Storm Water Pollution Prevention Plan (Weiss, 2013).

Pesticides were detected in storm water discharge samples during the 2012-2013 storm water season at concentrations consistent with those previously detected at most storm water discharge locations. However, at interceptor SW-4 where pesticides were not detected in the previous three reporting years, pesticides were detected. Continued monitoring of the Upland Area's storm water discharges for the presence of pesticides is required with future assessment of spatial and temporal distribution of pesticide concentrations warranted. Attention will be paid during future inspections for potential transport mechanisms that could be introducing pesticides to storm water interceptors and drain inlets, especially at interceptor SW-6 which has had the most frequent detections of pesticides in its storm water discharges.

## 8. REFERENCES

- Levin Richmond Terminal Corporation (LRTC), 2010. *2009-2010 Annual Report for Storm Water Discharges Associated with Industrial Activities*, June.
- LRTC, 2011. *2010-2011 Annual Report for Storm Water Discharges Associated with Industrial Activities*, June.
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## FIGURES





Figure 1. Site Location Map — United Heckathorn Superfund Site, Richmond, California

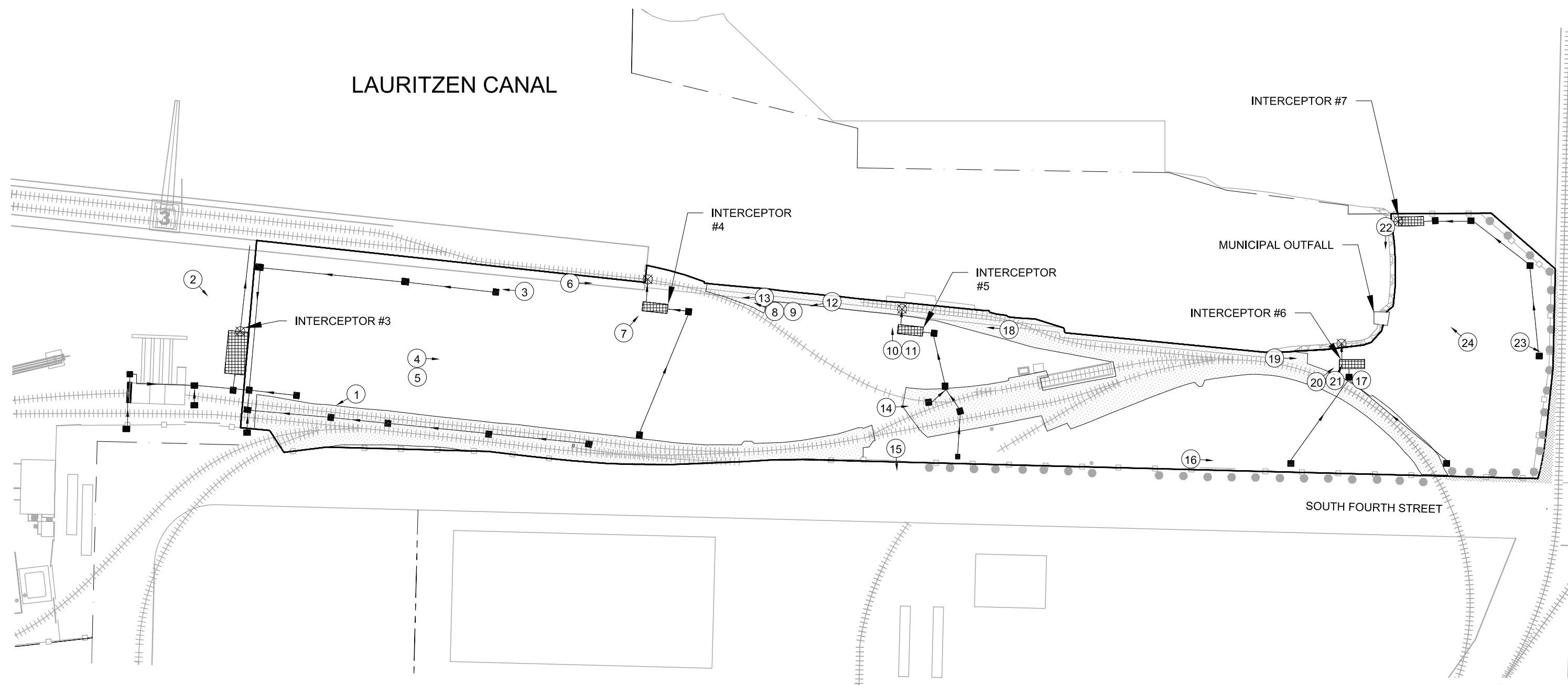




Figure 2. Site Layout — United Heckathorn Superfund Site, Richmond, California



# LAURITZEN CANAL



NOTE: THE MAJORITY OF SURFACES ARE PAVED EXCEPT WHERE INDICATED. NO AREAS RECEIVING RUNON FROM ADJACENT PROPERTIES HAVE BEEN IDENTIFIED.

## LEGEND

- |  |   |  |                                    |  |   |
|--|---|--|------------------------------------|--|---|
|  | FENCELINE                                   |  | STORM DRAIN INLET                  |  | UPLAND AREA BOUNDARY                                  |
|  | PHOTOGRAPH LOCATION, VIEW DIRECTION, NUMBER |  | GRAVEL COVER, LOCATION APPROXIMATE |  | LEVIN RICHMOND TERMINAL CORPORATION FACILITY BOUNDARY |
|  | STORM WATER SAMPLING LOCATION               |  | STORM WATER INTERCEPTOR            |  | RAIL LINE   |
|  |   |  | UNDERGROUND STORM WATER PIPE       |  | VEGETATION  |

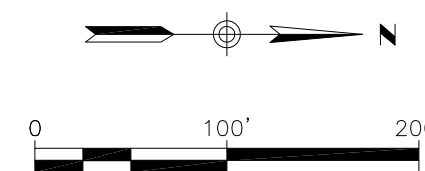


Figure 3. Upland Area – United Heckathorn Superfund Site, Richmond, California

## TABLES

Table 1. Proposed Site Work for 2013-2014 – United Heckathorn Superfund Site, Richmond, California

Aspect	Description	Anticipated Completion Date
General	Implement all activities (i.e., cap maintenance, storm water monitoring, interceptor cleanout) described in the O&M Plan. <sup>1</sup>	Continuously
	Submit report of operations and maintenance performed for the period of July 1, 2013 to June 30, 2014.	July 15, 2014
Concrete Cap	Perform 2013-2014 annual inspection of the cap under oversight of a registered engineer.	June 1, 2014
	Monitor identified cracks, seals, and joints for signs of propagation and/or degradation throughout upland capping system.	Continuously
	Surface pavement repair in areas near interceptor SW-3 where pavement is degraded.	March 1, 2014
	Perform concrete cap maintenance activities in areas described in Section 3.1, and as shown on Figure 3 and photographs in Appendix B.	March 1, 2014
	Establish three settlement monitoring points in the Upland Area and perform triennial land survey to determine cap elevations.	May 1, 2014
Gravel Cover	Perform gravel cover maintenance activities in areas described in Section 3.2, and as shown on Figure 3 and photographs in Appendix B.	March 1, 2014
	Install additional rip-rap or other stabilization measures in the embankment located south of the SW-7 area concrete cap knoll.	August 1, 2014
	Prevent animal burrowing into the gravel cover area identified south of interceptor SW-5; fill holes when detected.	Continuously
Storm Water System 3	Perform storm water collection system activities as described in Section 3.3, and shown on Figure 3 and photographs in Appendix B.	March 1, 2014
	Collect, quantify, and analyze accumulated sediment from interceptors SW-3 to SW-7 using USEPA Method 8081 once per year; include resulting data in the annual O&M Report.	May 31, 2014
	Perform video inspection of the storm water drainage system in the SW-4 and SW-5 areas to evaluate groundwater infiltration or inflow.	May 1, 2014
	Develop trend graphs showing temporary and spatial distribution of detected pesticides for the preceding five years.	July 1, 2014

<sup>1</sup> PES Environmental, Inc., 1999. *Revised Draft Operations and Maintenance Plan Upland Capping System, Former United Heckathorn Site*, March.

	Notes	4,4'-DDD	4,4'-DDE	4,4'-DDT	Aldrin	alpha-BHC	alpha-Chlordane	beta-BHC	Chlordane	delta-BHC	Dieldrin	Endosulfan I	Endosulfan II	Endosulfan sulfate	Endrin	Endrin aldehyde	Endrin ketone	gamma-BHC (Lindane)	gamma-Chlordane	Heptachlor	Heptachlor epoxide	Hexachlorobenzene	Hexachlorocyclopentadiene	Methoxychlor	Toxaphene	TPH-Diesel	TPH-Gasoline	TPH-Motor Oil	Benzene	Ethyl Benzene	MTBE	Toluene	m,p-Xylene	o-Xylene	Xylenes, Total			
SW-1		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L			
10/22/2012		<b>0.013</b>	<b>0.011</b>	<b>0.077</b>	< 0.005	< 0.01	< 0.05	< 0.005	< 0.1	< 0.005	< 0.01	< 0.02	< 0.02	< 0.05	< 0.01	< 0.05	< 0.05	< 0.02	< 0.05	< 0.01	< 0.01	< 0.5	< 1	< 0.1	< 0.5	---	< 50	870	< 0.5	< 0.5	< 0.5	< 0.5	---	---	< 0.5			
11/30/2012		< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	< 1	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	---	---	< 0.2	< 4	---	< 50	440	< 0.5	< 0.5	< 0.5	< 0.5	< 1.0	< 0.5	---			
12/21/2012	Note (a)	< 0.3	< 0.3	< 0.3	< 0.1	< 0.1	< 0.1	< 0.1	---	< 0.1	< 0.3	< 0.1	< 0.3	< 0.3	< 0.3	< 0.3	---	< 0.1	< 0.1	< 0.1	< 0.1	---	---	< 1.4	< 2.8	1,500 J	< 50	3,300	< 0.5	< 0.5	---	< 0.5	< 0.5	< 0.5	< 0.5	---		
SW-2		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L			
10/22/2012		<b>0.016</b>	< 0.01	<b>0.041</b>	< 0.005	< 0.01	< 0.05	< 0.005	< 0.1	< 0.005	< 0.01	< 0.02	< 0.02	< 0.05	< 0.01	< 0.05	< 0.05	< 0.02	< 0.05	< 0.01	< 0.01	< 0.5	< 1	< 0.1	< 0.5	---	< 50	1,300	< 0.5	< 0.5	< 0.5	< 0.5	---	---	< 0.5			
11/17/2012		< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 1	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	---	---	< 0.06	< 1	---	< 50	2,100	< 0.50	< 0.50	< 0.50	< 0.50	---	---	< 1.0			
11/21/2012	Note (a)	< 0.061	< 0.061	< 0.061	< 0.061	< 0.061	< 0.061	< 0.061	< 1	< 0.061	< 0.061	< 0.061	< 0.061	< 0.061	< 0.061	< 0.061	< 0.061	< 0.061	< 0.061	< 0.061	< 0.061	---	---	< 0.061	< 1	---	< 50	380	< 0.50	< 0.50	< 0.50	< 0.50	---	---	< 1.0			
11/30/2012	Note (a)	< 0.2	<b>0.038 J</b>	< 0.2	<b>0.033 J</b>	<b>0.040 J</b>	< 0.2	< 0.2	< 2.5	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	<b>0.028 J</b>	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	---	---	< 0.5	< 10	---	< 50	1,600	< 0.5	< 0.5	< 0.5	< 0.5	< 1.0	< 0.5	---			
12/21/2012		< 0.3	< 0.3	< 0.3	< 0.1	< 0.1	< 0.1	< 0.1	---	< 0.1	< 0.3	< 0.1	< 0.3	< 0.3	< 0.3	< 0.3	---	< 0.1	< 0.1	< 0.1	< 0.1	---	---	< 1.4	< 2.8	2,800 J	< 50	5,500	< 0.5	< 0.5	---	< 0.5	< 0.5	< 0.5	< 0.5	---		
SW-3		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L			
10/22/2012	Note (b)	< 0.01	< 0.01	<b>0.028</b>	< 0.005	< 0.01	< 0.05	< 0.005	< 0.1	< 0.005	< 0.01	< 0.02	< 0.02	< 0.05	< 0.01	< 0.05	< 0.05	< 0.02	< 0.05	< 0.01	< 0.01	< 0.5	< 1	< 0.1	< 0.5	---	< 50	360	< 0.5	< 0.5	< 0.5	< 0.5	---	---	< 0.5			
11/30/2012	Note (a)	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 2.5	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	---	---	< 0.5	< 10	---	< 50	1,400	< 0.5	< 0.5	< 0.5	< 0.5	< 1.0	< 0.5	---			
12/21/2012		< 0.3	< 0.3	< 0.3	< 0.1	< 0.1	< 0.1	< 0.1	---	< 0.1	< 0.3	< 0.1	< 0.3	< 0.3	< 0.3	< 0.3	---	< 0.1	< 0.1	< 0.1	< 0.1	---	---	< 1.4	< 2.8	810 J	< 50	2,400	< 0.5	< 0.5	---	< 0.5	< 0.5	< 0.5	< 0.5	---		
SW-4		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L			
10/22/2012		< 0.01	< 0.01	<b>0.023</b>	< 0.005	< 0.01	< 0.05	< 0.005	< 0.1	< 0.005	< 0.01	< 0.02	< 0.02	< 0.05	< 0.01	< 0.05	< 0.05	< 0.02	< 0.05	< 0.01	< 0.01	< 0.5	< 1	< 0.1	< 0.5	---	< 50	360	< 0.5	< 0.5	< 0.5	< 0.5	---	---	< 0.5			
11/17/2012		< 0.061	< 0.061	< 0.061	< 0.061	< 0.061	< 0.061	< 0.061	< 1	< 0.061	< 0.061	< 0.061	< 0.061	< 0.061	< 0.061	< 0.061	< 0.061	< 0.061	< 0.061	< 0.061	< 0.061	---	---	< 0.061	< 1	---	< 50	2,100	< 0.50	< 0.50	< 0.50	< 0.50	---	---	< 1.0			
11/28/2012		< 0.5	< 0.5	< 0.5	<b>0.081 J</b>	< 0.5	< 0.5	< 0.5	< 6.25	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	<b>0.056 J</b>	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	---	---	< 1.25	< 30	---	< 50	2,900	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	---			
11/30/2012		< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	---	---	< 1	< 20	---	< 50	1,800	< 0.5	< 0.5	< 0.5	< 0.5	< 1.0	< 0.5	---			
12/5/2012	Note (a)	< 1	< 1	< 1	< 0.5	< 0.5	< 0.5	< 0.5	---	< 0.5	< 1	< 0.5	< 1	< 1	< 1	< 1	---	< 0.5	< 0.5	< 0.5	< 0.5	---	---	< 5	< 10	240 J	< 50	< 300	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	---			
12/15/2012		< 0.9	< 0.9	< 0.9	< 0.5	< 0.5	< 0.5	< 0.5	---	< 0.5	< 0.9	< 0.5	< 0.9	< 0.9	< 0.9	< 0.9	---	< 0.5	< 0.5	< 0.5	< 0.5	---	---	< 4.7	< 9.4	2,400 J	< 50	1,100	< 0.5	< 0.5	---	< 0.5	< 0.5	< 0.5	---			
12/21/2012		< 0.3	< 0.3	< 0.3	< 0.1	< 0.1	< 0.1	< 0.1	---	< 0.1	< 0.3	< 0.1	< 0.3	< 0.3	< 0.3	< 0.3	---	< 0.1	< 0.1	< 0.1	< 0.1	---	---	< 1.4	< 2.8	1,900 J	< 50	1,100	< 0.5	< 0.5	---	< 0.5	< 0.5	< 0.5	< 0.5	---		
2/19/2013	Note (c)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	< 50	---	---	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	---		
2/19/2013	Duplicate	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	< 50	---	---	< 50	---	---	< 50	< 0.5	< 0.5	< 0.5	< 0.5	---
SW-5		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L			
10/22/2012		< 0.01	<b>0.013</b>	<b>0.043</b>	< 0.005	< 0.01	< 0.05	< 0.005	< 0.1	< 0.005	<b>0.019</b>	< 0.02	< 0.02	< 0.05	< 0.01	< 0.05	< 0.05	< 0.02	< 0.05	< 0.01	< 0.01	< 0.5	< 1	< 0.1	< 0.5	---	< 50	800	< 0.5	< 0.5	< 0.5	< 0.5	---	---	< 0.5			
11/17/2012		< 0.061	< 0.061	< 0.061	< 0.061	< 0.061	< 0.061	< 0.061	< 1	< 0.061	< 0.061	< 0.061	< 0.061	< 0.061	< 0.061	< 0.061	< 0.061	< 0.061	< 0.061	< 0.061	< 0.061	---	---	< 0.061	< 1	---	230	1,500	< 0.50	< 0.50	< 0.50	< 0.50	---	---	< 1.0			
11/21/2012	Note (a)	< 0.061	< 0.061	< 0.061	< 0.061	< 0.061	< 0.061	< 0.061	< 1	< 0.061	< 0.061	< 0.061	< 0.061	< 0.061	< 0.061	< 0.061	< 0.061	< 0.061	< 0.061	< 0.061	< 0.061	---	---	< 0.061	< 1	---	< 50	670	< 0.50	< 0.50	< 0.50	< 0.50	---	---	< 1.0			
11/30/2012	Note (a)	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	< 1	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08	---	---	< 0.2	< 4	---	< 50	520 J	< 0.5	< 0.5	< 0.5	< 0.5	< 1.0	< 0.5	---			
12/5/2012	Note (a)	< 0.5	< 0.5	< 0.5	< 0.3	< 0.3	< 0.3	< 0.3	---	< 0.3	< 0.5	< 0.3	< 0.5	< 0.5	< 0.5	< 0.5	---	< 0.3	< 0.3	< 0.3	< 0.3	---	---	< 2.5	< 5	270 J	< 50	< 300	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	---			
12/21/2012		< 0.09	< 0.09	< 0.09	< 0.05	< 0.05	< 0.05	< 0.05	---	<b>0.07</b>	< 0.09	< 0.05	< 0.09	< 0.09	< 0.09	< 0.09	---	< 0.05	< 0.05	< 0.05	< 0.05	---	---	< 0.5	< 0.9	310 J	< 50	550	< 0.5	< 0.5	---	< 0.5	< 0.5	< 0.5	< 0.5	---		
SW-6		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L			
11/30/2012	Note (a)	< 0.02	< 0.02	<b>0.024</b>	< 0.02	< 0.02	< 0.02	< 0.02	< 0.25	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	---	---	< 0.05	< 1	---	< 50	< 400	< 0.5	< 0.5	< 0.5	< 0.5	< 1.0	< 0.5	---			
12/5/2012	Note (a)	< 0.1	< 0.1	< 0.1	< 0.05	&lt																																

Weiss Associates

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Table 3. 2012 -2013 Annual Storm Water Sampling Data for General Parameters, Metals, and Polycyclic Aromatic Hydrocarbons—United Heckathorn Superfund Site, Richmond, California

Discharge Location	Notes	Chemical Oxygen Demand mg/L	pH -	Specific Conductance µmhos/cm	Total Oil and Grease mg/L	Total Organic Carbon mg/L	Total Suspended Solids mg/L	Aluminum µg/L	Antimony µg/L	Arsenic µg/L	Barium µg/L	Beryllium µg/L	Cadmium µg/L	Chromium µg/L	Cobalt µg/L	Copper µg/L	Iron µg/L	Lead µg/L	Mercury µg/L	Molybdenum µg/L	Nickel µg/L	Selenium µg/L	Silver µg/L	Thallium µg/L	Vanadium µg/L	Zinc µg/L	Acenaphthene µg/L	Acenaphthylene µg/L	Anthracene µg/L	Benzo(a)anthracene µg/L	Benzo(a)pyrene µg/L	Benzo(b)fluoranthene µg/L	Benzo(g,h,i)perylene µg/L	Benzo(k)fluoranthene µg/L	Chrysene µg/L	Dibenz(a,h)anthracene µg/L	Fluoranthene µg/L	Fluorene µg/L	Indeno(1,2,3-cd)pyrene µg/L	Naphthalene µg/L	Phenanthrene µg/L	Pyrene µg/L													
SW-1		60	---	130	<5	17	41	1,300	---	---	---	---	---	---	---	37	2,900	39	---	---	---	---	---	---	---	17	320	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---									
10/22/2012		< 20	7.43	48	<5	1.1	120	< 300	---	---	---	---	---	---	---	< 10	590	< 15	---	---	---	---	---	---	< 10	120	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---									
11/30/2012	Note (a)	79	7.2	160	38.8	5.9	140	2,600	---	---	---	---	---	---	---	170	6,800	410	---	---	---	---	---	---	---	18	2,400	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---								
12/21/2012																																																							
SW-2		420	---	202	<5	8.9	446	9,300	---	---	---	---	---	---	---	71	23,000	150	---	---	---	---	---	---	---	41	730	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---								
10/22/2012	Note (b)	280	---	190	<5.1	6.2	210	3,200	---	---	---	---	---	---	---	24	15,000	35	^	---	---	---	---	---	---	31	220	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---							
11/17/2012		130	---	140	<5.1	1.5	290	900	---	---	---	---	---	---	---	< 20	9,700	13	---	---	---	---	---	---	---	14	120	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---							
11/21/2012	Note (a)	< 20	8.08	220	<5.0	1.2	180	2,000	---	---	---	---	---	---	---	18	9,500	23	---	---	---	---	---	---	---	23	250	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---							
11/30/2012	Note (a)	150	8.1	270	15.1	8.1	440	1,900	---	---	---	---	---	---	---	120	8,100	410	---	---	---	---	---	---	---	22	2,700	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---							
12/21/2012		---	8.61	147	---	---	140	1,900	2.6	2.8	46	0.11	J	1.2	10	3.2	28	6,700	75	0.47	5.0	11	0.93	J	0.10	J	< 1.0	15	410	< 0.10	< 0.10	0.041	J	0.27	0.23	0.20	0.20	0.055	J	0.39	0.089	J	0.32	< 0.10	0.075	J	0.037	J	0.20	0.35					
4/4/2013	Note (c)	---	---	---	---	---	---	330	2.0	1.2	20	< 0.50	0.33	J	4.3	0.82	J	10	1,400	J	16	< 0.2	5.0	3.2	0.73	J	< 1.0	< 1.0	4.7	91	< 0.10	< 0.10	< 0.10	0.12	0.098	J	0.11	0.091	J	< 0.10	0.15	0.039	J	0.11	< 0.10	0.033	J	< 0.10	0.070	J	0.11				
4/4/2013	F - 10 micron, Note (c)	---	---	---	---	---	---	14	1.6	J	< 1.0	120	< 0.50	< 1.0	2.5	0.17	J	4.1	11	J	0.20	J	< 0.2	4.5	0.69	J	0.51	J	< 1.0	< 1.0	2.1	22	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11			
4/4/2013	F - 0.45 micron, Note (c)	---	---	---	---	---	---																																																
SW-3		110	---	631	<5	4.3	77	1,100	---	---	---	---	---	---	---	8.7	4,200	7.5	---	---	---	---	---	---	---	16	95	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---				
10/22/2012		< 20	7.65	550	<5.0	0.65	96	330	---	---	---	---	---	---	---	< 10	2,700	< 15	---	---	---	---	---	---	---	14	76	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---				
11/30/2012		41	7.3	1,940	<4.7	3.1	110	390	---	---	---	---	---	---	---	7.7	1,100	13	---	---	---	---	---	---	---	20	140	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---			
12/21/2012																																																							
SW-4		120	---	1,070	<5	7.7	58.5	250	---	---	---	---	---	---	---	6.6	830	6.7	---	---	---	---	---	---	---	140	78	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---			
10/22/2012		88	---	510	<5.0	5.4	60	970	---	---	---	---	---	---	---	27	2,700	48	^	---	---	---	---	---	---	73	220	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---		
11/17/2012		< 20	8.13	380	<5.0	2.5	190	600	---	---	---	---	---	---	---	< 10	2,100	16	---	---	---	---	---	---	---	77	97	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---		
11/28/2012		< 20	8.17	200	<5.0	0.89	360	820	---	---	---	---	---	---	---	12	4,200	21	---	---	---	---	---	---	---	71	150	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---		
11/30/2012	Note (a)	76	---	130	<5.0	1.8	77	120	---	---	---	---	---	---	---	4.1	330	3.7	---	---	---	---	---	---	---	20	51	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---		
12/5/2012	Note (a)	70	7.3	1,430	<4.52	6.4	34	170	---	---	---	---	---	---	---	7.3	510	7.2	---	---	---	---	---	---	---	630	71	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---		
12/15/2012		56	7.1	1,320	<4.7	5.9	30	350	---	---	---	---	---	---	---	6.3	870	13	---	---	---	---	---	---	---	560	100	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---		
12/21/2012		---	---	---	<5.0	---	38	93	---	---	---	---	---	---	---	5.1	480	4.8	< 0.20	---	< 1.0	---	---	---	---	56	73	< 0.09	< 0.09	0.4	1.9	2.5	1.2	2.0	0.2	3.7	1.2	0.4	0.1	0.6	0.3	1.1	1.4	---	---	---	---	---	---	---	---				
2/19/2013	Note (c)	---	---	---	---	---	---	< 50	---	---	---	---	---	---	---	4.6	180	1.0	< 0.20	---	1.6	---	---	---	---	53	36	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---		
2/19/2013	F - 0.45 micron, Note (c)	---	---	---	---	---	---																																																
2/19/2013	Duplicate, Note (c)	---	---	---	---	---	61	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
SW-5		73	---	150	<5	13	52.4	790	---	---	---	---	---	---	---	38	2,200	22	---	---	---	---	---	---	---	12	190	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
10/22/2012		20	---	110	<5.0	7.7	31.0	700	---	---	---	---	---	---	---	28	1,800	32	^	---	---	---	---	---	---	< 10	170	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
11/17/2012		< 20	---	68	<5.0	2.5	11.0	570	---	---	---	---	---	---	---	< 20	1,400	15	---	---	---	---	---	---	---	< 10	85	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
11/21/2012	Note (a)	< 20	7.76	72	<5.0	1.1	20	< 300	---	---	---	---	---	---	---	< 10	560	< 15	---	---	---	---	---	---	---	< 10	46	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
11/30/2012	Note (a)	19	---	75	<5.0	2.4	22	100	---	---	---	---	---	---	---	7.1	200	3.5	---	---	---	---	---	---	---	3	72	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
12/5/2012	Note (a)	18	6.5	110	<4.7	2.6	11.0	150	---	---	---	---	---	---	---	5.4	310	5.9	---	---	---	---	---	---	---	6	54	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
12/21/2012																																																							
SW-6		< 20	7.58	80	<5.0	1.1	3.4	< 300	---	---	---	---	---	---	---	< 10	290	< 15	---	---	---	---	---	---	< 10	42	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
11/30/2012	Note (a)	23	---	93	<4.7	4.0	< 5	130	---	---	---	---	---	---	---	19	200	7.8	---	---	---	---	---	---	2.9	160	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
12/5/2012	Note (a)	12	6.6	460	<4.7	2.2	9.0	190	---	---	---																																												

## **APPENDIX A**

### **UPLAND CAPPING SYSTEM INSPECTION FORM**



**Former United Heckathorn Superfund Site Upland Capping System Inspection Form**  
**Levin Richmond Terminal, 402 Wright Avenue, Richmond, California**

**I. General Information**

**Site:** Former United Heckathorn Superfund Site, **Inspector:** Greg Hulburd, P.E.  
Levin Richmond Terminal **Organization:** Weiss Associates  
**Address:** 402 Wright Avenue, Richmond, CA **Date and time of inspection:** October 31, 2013, 9:00 AM

**II. Upland Area Concrete Cap, Gravel Cover, and Drainage System Observations**

Note significant cracks, holes, penetrations, damage, settlement, or any exposure of underlying soil in any component of the capping system.

**North Main Terminal (SW-3)**

	Yes	No	N/A	Comments
Are concrete cap surfaces in adequate condition to promote effectiveness of the cap?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	See conditions noted below.
Are gravel cover surfaces in adequate condition to promote effectiveness of the cap?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is storm water drainage infrastructure in adequate condition to prevent exposure of underlying soil to runoff?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are corrective actions required?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Continued observation recommended. Sealing of pavement cracks and joints noted in some locations (see photographs).

**Describe any recent repairs/maintenance:**

No recent corrective actions to concrete cap or gravel cover noted in SW-3 area. Modifications to the storm water drainage system have been implemented in the past year including additional storage/settling capacity through addition of two Baker tanks.

**Describe conditions and locations of the capping system which require attention:**

Thick seams and smaller cracks in concrete noted in the following areas:

- northwest of rail entry gate (photo 1)
- along the western alley near drain inlet 3-DI-11A (photo 3)
- in the secondary storage area (photos 4 and 5).

Some surface pavement eroded in area southwest of interceptor SW-3. Heavier network of cracks and seams noted in this area.

No large scale settlement observed.

**Describe recommended corrective actions:**

Sealing of wider seams in concrete cap recommended, especially in seam in western alley near drain inlet 3-DI-11A. Surface pavement repair and sealing as needed in area south of interceptor SW-3 toward the SW-2 area where heavier network of cracking observed.

**North Main Terminal/United Heckathorn (SW-4)**

**Yes No N/A Comments**

Are concrete cap surfaces in adequate condition to promote effectiveness of the cap?

☒ ☐ ☐

Gap in asphalt-concrete interface.

Are gravel cover surfaces in adequate condition to promote effectiveness of the cap?

☒ ☐ ☐

Is storm water drainage infrastructure in adequate condition to prevent exposure of underlying soil to runoff?

☒ ☐ ☐

Are corrective actions required?

☒ ☐ ☐

**Describe any recent repairs/maintenance:**

Concrete curb improvements were implemented along the western alley south of interceptor SW-4 to prevent runoff to the rail lines (photo 6). A section of the concrete cap off of the southeast corner of interceptor SW-4 was cut out and replaced to repair a crack in the concrete cap (photo 7). These repairs were made in the fall of 2013.

**Describe conditions and locations of the capping system which require attention:**

A gap was observed in the asphalt-concrete interface along rail line which runs northeast toward the center of the terminal in the SW-4 area. (photos 8 and 9).

No settlement observed.

**Describe recommended corrective actions:**

Monitor the gap along the concrete-asphalt interface. If widening of the gap is observed, sealing is recommended.

**North Main Terminal/United Heckathorn (SW-5)**

	Yes	No	N/A	Comments
Are concrete cap surfaces in adequate condition to promote effectiveness of the cap?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Minor cracks noted (photo 11)
Are gravel cover surfaces in adequate condition to promote effectiveness of the cap?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Trackmat installed (photo 14). Evidence of animal burrowing observed (photo 12)
Is storm water drainage infrastructure in adequate condition to prevent exposure of underlying soil to runoff?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are corrective actions required?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

**Describe any recent repairs/maintenance:**

New gravel was added to a section of the gravel cover, north of interceptor SW-5 (photo 13).  
New, oil absorbent filter fabric has been added to the rail lines in the gravel cover located in the SW-5 area (photo 14).

**Describe conditions and locations of the capping system which require attention:**

Minor cracks were observed in the concrete cap east of interceptor SW-5 (photo 11).  
Evidence of animal burrowing was observed in the gravel cover area (photo 12).  
Concrete joints at the 4th Street truck entry show some signs of deterioration and cracking (photo 15).

**Describe recommended corrective actions:**

Continue to monitor for minor cracks to see if their conditions worsen or if they continue to propagate.  
Prevent animals from burrowing in the gravel cover areas. Fill in and repair burrows as needed.

**North Main Terminal/United Heckathorn (SW-6)**

	Yes	No	N/A	Comments
Are concrete cap surfaces in adequate condition to promote effectiveness of the cap?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Minor cracks observed (photos 17 and 21)
Are gravel cover surfaces in adequate condition to promote effectiveness of the cap?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Additional gravel needed in area identified in photo 18.
Is storm water drainage infrastructure in adequate condition to prevent exposure of underlying soil to runoff?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Potential landscape runoff into SW-6 (photo 16).
Are corrective actions required?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Additional gravel needed in area identified in photo 18.

**Describe any recent repairs/maintenance:**

None observed.

**Describe conditions and locations of the capping system which require attention:**

Minor cracks noted south of interceptor SW-6 in concrete cap (photos 17 and 21).  
Area of gravel cover in need of additional gravel (photo 18).  
Swale along eastern boundary of Main Terminal, southeast of interceptor SW-6 is identified as an area that may receive landscaping runoff which is conveyed to interceptor SW-6 (photo 16).  
No settlement observed.

**Describe recommended corrective actions:**

Continue to monitor for minor cracks to see if their conditions worsen or if they continue to propagate.  
Add additional gravel to the gravel cover area identified in photo 18.  
Continue to monitor for settlement in area south of interceptor SW-6 and identified in the September 2011 Five-Year Review as an area of potential settlement (no signs of settlement were observed during this inspection).  
Control runoff from the landscaped areas along 4th Street and prevent its migration into the SW-6 storm water drainage system.

**North Main Terminal/United Heckathorn (SW-7)**

**Yes No N/A Comments**

Are concrete cap surfaces in adequate condition to promote effectiveness of the cap?

☒ ☐ ☐

Are gravel cover surfaces in adequate condition to promote effectiveness of the cap?

☐ ☐ ☒

Is storm water drainage infrastructure in adequate condition to prevent exposure of underlying soil to runoff?

☒ ☐ ☐

Standing water noted in interceptor. Source of water unknown.

Are corrective actions required?

☐ ☒ ☐

**Describe any recent repairs/maintenance:**

Discharge line from interceptor SW-7 retrofitted to prevent flow between the interceptor and the Lauritzen Channel (fall of 2012).

**Describe conditions and locations of the capping system which require attention:**

Minor cracks observed in the SW-7 concrete cap knoll at the following locations:

- north side of cap at SW-7 extends drain inlet, 7DI-17 south towards top of cap (photo 23)
- west side of cap north of interceptor SW-7
- on top of the concrete cap knoll (photo 24)

The cracks shown in photos 23 and 24 are indicative of the cracking observed in the SW-7 area.

Rip-rap and concrete covered shoreline exposed in some areas on the outside of the capped area (photo 22).

**Describe recommended corrective actions:**

No corrective actions required; however, continue to monitor cracks noted in this inspection for further propagation and settlement. The embankment south of the SW-7 cap may require additional rip-rap or concrete stabilization.

Signature:



Date: 10/31/2013

## **APPENDIX B**

### **UPLAND CAPPING SYSTEM INSPECTION PHOTOGRAPHS**



Photo 1 – Southern 4<sup>th</sup> Street rail entry, looking southeast: Thick seam in concrete cap northwest of rail entry gate in the SW-3 area with cracking in foreground.



Photo 2 - Looking east toward interceptor SW-3: Thick seams and surface deterioration. Heavier network of seams and cracking noted in SW-3 area.

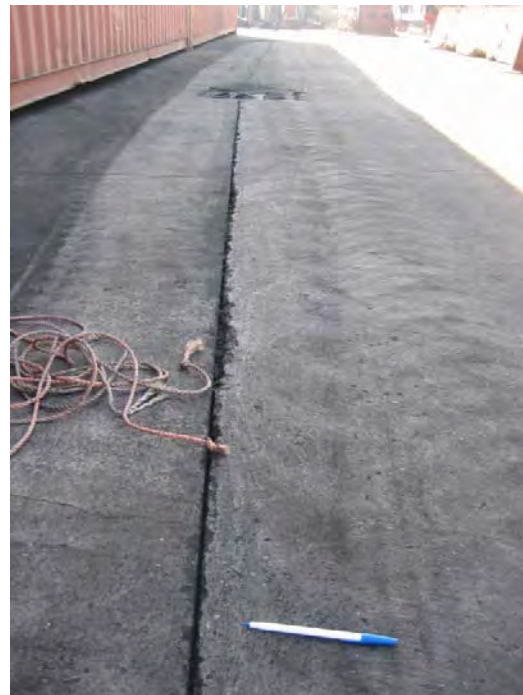


Photo 3 - Looking south toward drain inlet 3-DI-11A: Thick seam noted in concrete cap.





Photo 4 - Looking north in secondary storage area: Thick seams in concrete cap running north and south and east and west.



Photo 5 - Focused picture of cracks in previous photo, south of secondary storage area in the SW-3 area.



Photo 6 - Looking northwest along western alley south of interceptor SW-4: Concrete berm improvement along alley to prevent runoff toward the rail line.





Photo 7 - Looking west: Former crack extending from southeast corner of SW-4 running to the east was repaired. The cracked section of the cap was cut out and replaced with fresh concrete.



Photo 8 - Looking southwest: Seam at concrete-asphalt interface along rail line which passes interceptor SW-4 and runs northeast toward center of terminal.



Photo 9 - Focused picture of concrete-asphalt interface in previous photo near SW-4 interceptor.



Photo 10 - Looking west toward interceptor SW-5.





Photo 11 - East of interceptor SW-5: Minor cracks in concrete cap noted.



Photo 12 - South of interceptor SW-5: Some evidence of burrows in gravel cover south of interceptor SW-5, adjacent to western edge of terminal.





Photo 13 - Looking south toward interceptor SW-4 (not visible): New gravel added to gravel cover in past year.



Photo 14 - East of interceptor SW-5, looking north toward SW-7 area: Gravel cover in this area includes filter fabric in rail lines.



Photo 15 - East of interceptor SW-5 at 4<sup>th</sup> Street entry: Concrete joint along gate shows some minor degradation.



Photo 16 - Swale along eastern boundary of Main Terminal southeast of interceptor SW-6: Landscaping on eastern side of fence may introduce runoff to interceptor SW-6.





Photo 17 - Southeast of interceptor SW-6: Sealant in concrete cap crack. Date of repair unknown.



Photo 18 - Looking south toward interceptor SW-5: Area of gravel cover located in SW-6 area which could benefit from addition of more gravel.





Photo 19 - South of interceptor SW-6, looking north: Portion of gravel cover south of interceptor SW-6 identified in the September 2011 Five-Year Review as being an area of potential settlement (EPA, 2011).



Photo 20 - Southeast of interceptor SW-6, looking northwest: View of the gravel cover and concrete cap interface located in the portion of the gravel cover identified in the September 2011 Five-Year Review as being an area of potential settlement (EPA, 2011).



Photo 21 - Southeast corner of interceptor SW-6: Small crack noted in concrete cap.



Photo 22- South of interceptor SW-7, looking east: View of the embankment south of the SW-7 area.





Photo 23 - At the northern boundary of the Heckathorn site, looking north toward drain inlet 7-DI-17: Minor cracks in concrete cap typical of those noted in the SW-7 area.



Photo 24 - On top of the concrete cap in the SW-7 area, looking southwest: Minor cracks in concrete cap typical of those noted in the SW-7 area.

## **APPENDIX C**

### **2012-2013 ANNUAL STORM WATER MONITORING REPORT**

**2012-2013 ANNUAL REPORT FOR STORM WATER  
DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITIES**

**for**

**Levin Richmond Terminal Corporation  
WDID No.: 2 07I002394**

*Prepared for*

**Regional Water Quality Control Board – San Francisco Bay Region  
1515 Clay Street, Suite 1400  
Oakland, California 94612**

June 30, 2013



**LEVIN RICHMOND TERMINAL CORPORATION.**

402 Wright Avenue, Richmond CA 94804

Telephone: (510) 232-4422

Facsimile: (510) 236-0128

June 30, 2013

Mr. Danny Pham  
Regional Water Quality Control Board—San Francisco Bay Region  
1515 Clay Street, Suite 1400  
Oakland, California 94612

RE: *2012-2013 Annual Report for Storm Water Discharges Associated with Industrial Activities*  
Levin Richmond Terminal Corporation  
WDID No.: 2 07I002394

Dear Mr. Pham:

Enclosed please find the *2012-2013 Annual Report for Storm Water Discharges Associated with Industrial Activities* presenting storm water monitoring data and observations related to storm water compliance activities at the Levin Richmond Terminal Facility, located at 402 Wright Avenue, Richmond, California. Storm water compliance activities were conducted under the requirements of the *Waste Discharge Requirements for Discharges of Storm Water Associated with Industrial Activities Excluding Construction Activities* specified in the State Water Resources Control Board (SWRCB) Water Quality Order No. 97-03-DWQ, National Pollutant Discharge Elimination System (NPDES) General Permit No. CAS000001 (*Industrial General Permit*).

Please feel free to contact me if you have any questions or concerns with the attached report.

Sincerely,

A handwritten signature in blue ink that reads "Gary Levin".

Gary Levin  
Chief Executive Officer  
(510) 307-4091

Attachment A. 2012-2013 Annual Report for Storm Water Discharges Associated with Industrial Activities  
Attachment B. 2012-2013 Annual Report for Storm Water Discharges Associated with Industrial Activities - Additional Explanations  
Attachment C. Analytical Data  
Table 1. 2012 – 2013 Annual Storm Water Sampling Data for General Parameters, Metals, and Polycyclic Aromatic Hydrocarbons  
Table 2. 2012 – 2013 Annual Storm Water Sampling Data for Pesticides, Petroleum Hydrocarbons, and Volatile Organic Compounds  
2012-2013 Laboratory Analytical Reports

**ATTACHMENT A**

**2012-2013 ANNUAL REPORT FOR STORM WATER DISCHARGES  
ASSOCIATED WITH INDUSTRIAL ACTIVITIES**

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STATE OF CALIFORNIA  
STATE WATER RESOURCES CONTROL BOARD  
**2012-2013 ANNUAL REPORT**  
FOR STORM WATER DISCHARGES ASSOCIATED  
WITH INDUSTRIAL ACTIVITIES

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Reporting Period July 1, 2012 through June 30, 2013

**An Annual Report is required to be submitted to your local Regional Water Quality Control Board (Regional Board) by July 1 of each year.** This document must be certified and signed, under penalty of perjury, by the appropriate official of your company. Many of the Annual Report questions require an explanation. Please provide explanations on a separate sheet as an attachment. **Retain a copy of the completed Annual Report for your records.**

Please circle or highlight any information contained in Items A, B, and C below that is new or revised so we can update our records. Please remember that a Notice of Termination and new Notice of Intent are required whenever a facility operation is relocated or changes ownership.

If you have any questions, please contact your Regional Board Industrial Storm Water Permit Contact. The names, telephone numbers, and e-mail addresses of the Regional Board contacts, as well as the Regional Board Offices addresses are indicated below.

**REGIONAL BOARD INFORMATION:**

San Francisco Bay Region  
1515 Clay Street, Ste.1400  
Oakland, CA 94612

Contact: Danny Pham  
Tel: (510) 622-2300  
Email: r2stormwater@waterboards.ca.gov

**GENERAL INFORMATION**

**A. Facility Information:**

Levin Richmond Terminal Corp  
402 Wright Ave  
Richmond, CA 94804

**WDID NO: 2 071002394**

SIC Code(s):

**4491** Marine Cargo Handling

Contact: Gary Levin  
Email: garyl@levinterminal.com  
Tel: 510-307-4091

**B. Facility Operator Information:**

Levin Richmond Terminal Corp  
402 Wright Ave  
Richmond, CA 94804

Contact: Gary Levin  
Email: garyl@levinterminal.com  
Tel: 510-307-4091

**C. Facility Billing Information:**

Levin Richmond Terminal Corp  
402 Wright Ave  
Richmond, CA 94804

Contact: Gary Levin  
Email: garyl@levinterminal.com  
Tel: 510-307-4091

Additional Table D Parameters: Al,Fe,Pb,Zn

2012-2013  
**ANNUAL REPORT**

**SPECIFIC INFORMATION**

**MONITORING AND REPORTING PROGRAM**

**D. SAMPLING AND ANALYSIS EXEMPTIONS AND REDUCTIONS**

1. For the reporting period, was your facility exempt from collecting and analyzing samples from **two** storm events in accordance with sections B.12 or 15 of the General Permit?

☐ **YES** Go to Item D.2

☒ **NO** Go to Section E

2. Indicate the reason your facility is exempt from collecting and analyzing samples from **two** storm events. Attach a copy of the first page of the appropriate certification if you check boxes ii, iii, iv, or v.

- i. ☐ Participating in an Approved Group Monitoring Plan

Group Name: \_\_\_\_\_

- ii. ☐ Submitted **No Exposure Certification (NEC)**

Date Submitted: \_\_\_\_\_

Re-evaluation Date: \_\_\_\_\_

Does facility continue to satisfy NEC conditions?

☐ YES

☐ NO

- iii. ☐ Submitted **Sampling Reduction Certification (SRC)**

Date Submitted: \_\_\_\_\_

Re-evaluation Date: \_\_\_\_\_

Does facility continue to satisfy SRC conditions?

☐ YES

☐ NO

- iv. ☐ Received Regional Board Certification

Certification Date: \_\_\_\_\_

- v. ☐ Received Local Agency Certification

Certification Date: \_\_\_\_\_

3. If you checked boxes i or iii above, were you scheduled to sample **one** storm event during the reporting year?

☐ **YES** Go to Section E

☐ **NO** Go to Section F

4. If you checked boxes ii, iv, or v, go to Section F.

**E. SAMPLING AND ANALYSIS RESULTS**

1. How many storm events did you sample? \_\_\_\_\_

7

If less than 2, **attach explanation** (if you checked item D.2.i or iii. above, only attach explanation if you answer "0").

2. Did you collect storm water samples from the first storm of the wet season that produced a discharge during scheduled facility operating hours? (Section B.5 of the General Permit)

☒ **YES**

☐ **NO**, **attach explanation** (Please note that if you do not sample the first storm event, you are still required to sample 2 storm events)

3. How many storm water discharge locations are at your facility? \_\_\_\_\_

up to 10



4. For each storm event sampled, did you collect and analyze a sample from each of the facility's storm water discharge locations? ☒ YES, go to Item E.6 ☐ NO
5. Was sample collection or analysis reduced in accordance with Section B.7.d of the General Permit? ☐ YES ☐ NO, **attach explanation**
- If "YES", **attach documentation** supporting your determination that two or more drainage areas are substantially identical.
- Date facility's drainage areas were last evaluated \_\_\_\_\_
6. Were all samples collected during the first hour of discharge? ☐ YES ☒ NO, **attach explanation**
7. Was all storm water sampling preceded by three (3) working days without a storm water discharge? ☐ YES ☒ NO, **attach explanation**
8. Were there any discharges of stormwater that had been temporarily stored or contained? (such as from a pond) ☐ YES ☒ NO, go to Item E.10
9. Did you collect and analyze samples of temporarily stored or contained storm water discharges from two storm events? (or one storm event if you checked item D.2.i or iii. above) ☐ YES ☐ NO, **attach explanation**
10. Section B.5. of the General Permit requires you to analyze storm water samples for pH, Total Suspended Solids (TSS), Specific Conductance (SC), Total Organic Carbon (TOC) or Oil and Grease (O&G), other pollutants likely to be present in storm water discharges in significant quantities, and analytical parameters listed in Table D of the General Permit.
- a. Does Table D contain any additional parameters related to your facility's SIC code(s)? ☒ YES ☐ NO, Go to Item E.11
- b. Did you analyze all storm water samples for the applicable parameters listed in Table D? ☒ YES ☐ NO
- c. If you did not analyze all storm water samples for the applicable Table D parameters, check one of the following reasons:
- \_\_\_\_\_ In prior sampling years, the parameter(s) have not been detected in significant quantities from two consecutive sampling events. **Attach explanation**
- \_\_\_\_\_ The parameter(s) is not likely to be present in storm water discharges and authorized non-storm water discharges in significant quantities based upon the facility operator's evaluation. **Attach explanation**
- \_\_\_\_\_ Other. **Attach explanation**
11. For each storm event sampled, attach a copy of the laboratory analytical reports and report the sampling and analysis results using **Form 1** or its equivalent. The following must be provided for each sample collected:
- Date and time of sample collection
  - Name and title of sampler.
  - Parameters tested.
  - Name of analytical testing laboratory.
  - Discharge location identification.
  - Testing results.
  - Test methods used.
  - Test detection limits.
  - Date of testing.
  - Copies of the laboratory analytical results.

F. QUARTERLY VISUAL OBSERVATIONS

1. **Authorized Non-Storm Water Discharges**

Section B.3.b of the General Permit requires quarterly visual observations of all authorized non-storm water discharges and their sources.

- a. Do authorized non-storm water discharges occur at your facility?

☐

YES

☒

NO

Go to Item F.2

- b. Indicate whether you visually observed all authorized non-storm water discharges and their sources during the quarters when they were discharged. **Attach an explanation for any "NO" answers.** Indicate "N/A" for quarters without any authorized non-storm water discharges.

July -September

☐

YES

☐

NO

☒

N/A

October-December

☐

YES

☐

NO

☒

N/A

January-March

☐

YES

☐

NO

☒

N/A

April-June

☐

YES

☐

NO

☒

N/A

- c. Use **Form 2** to report quarterly visual observations of authorized non-storm water discharges or provide the following information.

- i. name of each authorized non-storm water discharge
- ii. date and time of observation
- iii. source and location of each authorized non-storm water discharge
- iv. characteristics of the discharge at its source and impacted drainage area/discharge location
- v. name, title, and signature of observer
- vi. **any** new or revised BMPs necessary to reduce or prevent pollutants in authorized non-storm water discharges. Provide new or revised BMP implementation date.

2. **Unauthorized Non-Storm Water Discharges**

Section B.3.a of the General Permit requires quarterly visual observations of all drainage areas to detect the presence of unauthorized non-storm water discharges and their sources.

- a. Indicate whether you visually observed all drainage areas to detect the presence of unauthorized non-storm water discharges and their sources. **Attach an explanation for any "NO" answers.**

July -September

☒

YES

☐

NO

October-December

☒

YES

☐

NO

January-March

☒

YES

☐

NO

April-June

☒

YES

☐

NO

- b. Based upon the quarterly visual observations, were any unauthorized non-storm water discharges detected?

☒

YES

☐

NO

Go to item F.2.d

- c. Have each of the unauthorized non-storm water discharges been eliminated or permitted?

☒

YES

☐

NO

Attach explanation

- d. Use **Form 3** to report quarterly unauthorized non-storm water discharge visual observations or provide the following information.

- i. name of each unauthorized non-storm water discharge.
- ii. date and time of observation.
- iii. source and location of each unauthorized non-storm water discharge.
- iv. characteristics of the discharge at its source and impacted drainage area/discharge location.
- v. name, title, and signature of observer.
- vi. **any** corrective actions necessary to eliminate the source of each unauthorized non-storm water discharge and to clean impacted drainage areas. Provide date unauthorized non-storm water discharge(s) was eliminated or scheduled to be eliminated.

G. MONTHLY WET SEASON VISUAL OBSERVATIONS

Section B.4.a of the General Permit requires you to conduct monthly visual observations of storm water discharges at all storm water discharge locations during the wet season. These observations shall occur during the first hour of discharge or, in the case of temporarily stored or contained storm water, at the time of discharge.

1. Indicate below whether monthly visual observations of storm water discharges occurred at all discharge locations. **Attach an explanation for any "NO" answers.** Include in this explanation whether any eligible storm events occurred during scheduled facility operating hours that did not result in a storm water discharge, and provide the date, time, name and title of the person who observed that there was no storm water discharge.

	YES	NO		YES	NO
October	<input checked="" type="checkbox"/>	<input type="checkbox"/>	February	<input checked="" type="checkbox"/>	<input type="checkbox"/>
November	<input checked="" type="checkbox"/>	<input type="checkbox"/>	March	<input checked="" type="checkbox"/>	<input type="checkbox"/>
December	<input checked="" type="checkbox"/>	<input type="checkbox"/>	April	<input checked="" type="checkbox"/>	<input type="checkbox"/>
January	<input checked="" type="checkbox"/>	<input type="checkbox"/>	May	<input checked="" type="checkbox"/>	<input type="checkbox"/>

2. Report monthly wet season visual observations using **Form 4** or provide the following information.

- date, time, and location of observation
- name and title of observer
- characteristics of the discharge (i.e., odor, color, etc.) and source of any pollutants observed.
- any** new or revised BMPs necessary to reduce or prevent pollutants in storm water discharges. Provide new or revised BMP implementation date.

**ANNUAL COMPREHENSIVE SITE COMPLIANCE EVALUATION (ACSCE)**

H. ACSCE CHECKLIST

Section A.9 of the General Permit requires the facility operator to conduct one ACSCE in each reporting period (July 1-June 30). Evaluations must be conducted within 8-16 months of each other. The SWPPP and monitoring program shall be revised and implemented, as necessary, within 90 days of the evaluation. The checklist below includes the minimum steps necessary to complete a ACSCE. Indicate whether you have performed each step below. **Attach an explanation for any "NO" answers.**

1. Have you inspected all potential pollutant sources and industrial activities areas? ☒ YES ☐ NO  
The following areas should be inspected:

- areas where spills and leaks have occurred during the last year.
- outdoor wash and rinse areas.
- process/manufacturing areas.
- loading, unloading, and transfer areas.
- waste storage/disposal areas.
- dust/particulate generating areas.
- erosion areas.
- building repair, remodeling, and construction
- material storage areas
- vehicle/equipment storage areas
- truck parking and access areas
- rooftop equipment areas
- vehicle fueling/maintenance areas
- non-storm water discharge generating areas

2. Have you reviewed your SWPPP to assure that its BMPs address existing potential pollutant sources and industrial activities areas? ☒ YES ☐ NO

3. Have you inspected the entire facility to verify that the SWPPP's site map, is up-to-date? The following site map items should be verified: ☒ YES ☐ NO

- facility boundaries
- outline of all storm water drainage areas
- areas impacted by run-on
- storm water discharges locations
- storm water collection and conveyance system
- structural control measures such as catch basins, berms, containment areas, oil/water separators, etc.

4. Have you reviewed all General Permit compliance records generated since the last annual evaluation? ☒ YES ☐ NO

The following records should be reviewed:

- quarterly authorized non-storm water discharge visual observations
- monthly storm water discharge visual observation
- records of spills/leaks and associated clean-up/response activities
- quarterly unauthorized non-storm water discharge visual observations
- Sampling and Analysis records
- preventative maintenance inspection and maintenance records

5. Have you reviewed the major elements of the SWPPP to assure compliance with the General Permit? ☒ YES ☐ NO

The following SWPPP items should be reviewed:

- pollution prevention team
- list of significant materials
- description of potential pollutant sources
- assessment of potential pollutant sources
- identification and description of the BMPs to be implemented for each potential pollutant source

6. Have you reviewed your SWPPP to assure that a) the BMPs are adequate in reducing or preventing pollutants in storm water discharges and authorized non-storm water discharges, and b) the BMPs are being implemented? ☒ YES ☐ NO

The following BMP categories should be reviewed:

- good housekeeping practices
- spill response
- employee training
- erosion control
- quality assurance
- preventative maintenance
- material handling and storage practices
- waste handling/storage
- structural BMPs

7. Has all material handling equipment and equipment needed to implement the SWPPP been inspected? ☒ YES ☐ NO

#### I. ACSCE EVALUATION REPORT

The facility operator is required to provide an evaluation report that includes:

- identification of personnel performing the evaluation
- the date(s) of the evaluation
- necessary SWPPP revisions
- schedule for implementing SWPPP revisions
- any incidents of non-compliance and the corrective actions taken.

Use **Form 5** to report the results of your evaluation or develop an equivalent form.

#### J. ACSCE CERTIFICATION

The facility operator is required to certify compliance with the Industrial Activities Storm Water General Permit. To certify compliance, both the SWPPP and Monitoring Program must be up to date and be fully implemented.

Based upon your ACSCE, do you certify compliance with the Industrial Activities Storm Water General Permit?

☒ YES ☐ NO

If you answered "NO" **attach an explanation** to the ACSCE Evaluation Report why you are not in compliance with the Industrial Activities Storm Water General Permit.

## ATTACHMENT SUMMARY

Answer the questions below to help you determine what should be attached to this annual report. Answer NA (Not Applicable) to questions 2-4 if you are not required to provide those attachments.

1. Have you attached Forms 1,2,3,4, and 5 or their equivalent? ☒ YES (Mandatory)
2. If you conducted sampling and analysis, have you attached the laboratory analytical reports? ☒ YES ☐ NO ☐ NA
3. If you checked box II, III, IV, or V in item D.2 of this Annual Report, have you attached the first page of the appropriate certifications? ☐ YES ☐ NO ☒ NA
4. Have you attached an explanation for each "NO" answer in items E.1, E.2, E.5-E.7, E.9, E.10.c, F.1.b, F.2.a, F.2.c, G.1, H.1-H.7, or J? ☒ YES ☐ NO ☐ NA

## ANNUAL REPORT CERTIFICATION

I am duly authorized to sign reports required by the INDUSTRIAL ACTIVITIES STORM WATER GENERAL PERMIT (see Standard Provision C.9) and I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those person directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Printed Name: GARY M. LEVIN  
Signature: Gary M. Levin Date: 6/30/2013  
Title: CEO

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SIDE A

FORM 1-SAMPLING & ANALYSIS RESULTS

FIRST STORM EVENT

- If analytical results are less than the detection limit (or non detectable), show the value as less than the numerical value of the detection limit (example: <.05)
- If you did not analyze for a required parameter, do not report "0". Instead, leave the appropriate box blank

- When analysis is done using portable analysis (such as portable pH meters, SC meters, etc.), indicate "PA" in the appropriate test method used box.
- Make additional copies of this form as necessary.

NAME OF PERSON COLLECTING SAMPLE(S): Tony Lester

TITLE: Operations Supervisor

SIGNATURE: 

DESCRIBE DISCHARGE LOCATION Example: NW Out Fall	DATE/TIME OF SAMPLE COLLECTION	TIME DISCHARGE STARTED	ANALYTICAL RESULTS For First Storm Event									
			BASIC PARAMETERS					OTHER PARAMETERS				
			pH	TSS	SC	O&G	TOC	Aluminum	Iron	Lead	Zinc	
SW-1	<u>10/22/2012</u> <input checked="" type="checkbox"/> AM 0700 <input type="checkbox"/> PM	<u>0700</u> <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM		41	130	< 5	17	1.3	2.9	0.039	0.32	
SW-2	<u>10/22/2012</u> <input checked="" type="checkbox"/> AM 0800 <input type="checkbox"/> PM	<u>0700</u> <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM		446	202	< 5	8.9	9.3	23	0.15	0.73	
SW-3	<u>10/22/2012</u> <input checked="" type="checkbox"/> AM 0920 <input type="checkbox"/> PM	<u>0700</u> <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM		77	631	< 5	4.3	1.1	4.2	0.0075	0.095	
SW-4	<u>10/22/2012</u> <input checked="" type="checkbox"/> AM 0900 <input type="checkbox"/> PM	<u>0700</u> <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM		58.5	1,070	< 5	7.7	0.25	0.83	0.0067	0.078	
TEST REPORTING UNITS:			pH Units	mg/l	umho/cm	mg/l	mg/l	mg/L	mg/L	mg/L	mg/L	
TEST METHOD DETECTION LIMIT:				1	10	5	0.3	0.050	0.020	0.0005	0.005	
TEST METHOD USED:				SM2540D	SM2510B	E1664A	E415.3	E200.7	E200.7	E200.8	E200.8	
ANALYZED BY (SELF/LAB):				lab	lab	lab	lab	lab	lab	lab	lab	

TSS - Total Suspended Solids

SC - Specific Conductance

O&G - Oil & Grease

TOC - Total Organic Carbon

Please see attached tables for other parameter results from this sampling and analysis.



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SIDE A

FORM 1-SAMPLING & ANALYSIS RESULTS

FIRST STORM EVENT

- If analytical results are less than the detection limit (or non detectable), show the value as less than the numerical value of the detection limit (example: <.05)
- If you did not analyze for a required parameter, do not report "0". Instead, leave the appropriate box blank
- When analysis is done using portable analysis (such as portable pH meters, SC meters, etc.), indicate "PA" in the appropriate test method used box.
- Make additional copies of this form as necessary.

NAME OF PERSON COLLECTING SAMPLE(S): Tony Lester

TITLE: Operations Supervisor

SIGNATURE: 

DESCRIBE DISCHARGE LOCATION Example: NW Out Fall	DATE/TIME OF SAMPLE COLLECTION	TIME DISCHARGE STARTED	ANALYTICAL RESULTS For First Storm Event									
			BASIC PARAMETERS					OTHER PARAMETERS				
			pH	TSS	SC	O&G	TOC	Aluminum	Iron	Lead	Zinc	
SW-5	<u>10/22/2012</u> <input checked="" type="checkbox"/> AM 0930 <input type="checkbox"/> PM	<u>0700</u> <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM		52.4	150	< 5	13	0.79	2.2	0.022	0.19	
SW-11	<u>10/22/2012</u> <input checked="" type="checkbox"/> AM 1000 <input type="checkbox"/> PM	<u>0700</u> <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM		111	591	< 5	4.7	1.7	2.1	0.018	0.068	
SW-12	<u>10/22/2012</u> <input checked="" type="checkbox"/> AM 1030 <input type="checkbox"/> PM	<u>0700</u> <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM		110	165	< 5	26	2.6	5.2	0.027	0.21	
	<u>      </u> <input type="checkbox"/> AM <input type="checkbox"/> PM	<u>      </u> <input type="checkbox"/> AM <input type="checkbox"/> PM										
TEST REPORTING UNITS:			pH Units	mg/l	umho/cm	mg/l	mg/l	mg/L	mg/L	mg/L	mg/L	
TEST METHOD DETECTION LIMIT:				1	10	5	0.3	0.050	0.020	0.0005	0.005	
TEST METHOD USED:				SM2540D	SM2510B	E1664A	E415.3	E200.7	E200.7	E200.8	E200.8	
ANALYZED BY (SELF/LAB):				lab	lab	lab	lab	lab	lab	lab	lab	

TSS - Total Suspended Solids

SC - Specific Conductance

O&G - Oil & Grease

TOC - Total Organic Carbon

Please see attached tables for other parameter results from this sampling and analysis.

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SIDE B

FORM 1-SAMPLING & ANALYSIS RESULTS

SECOND STORM EVENT

- If analytical results are less than the detection limit (or non detectable), show the value as less than the numerical value of the detection limit (example: <.05)
- If you did not analyze for a required parameter, do not report "0". Instead, leave the appropriate box blank
- When analysis is done using portable analysis (such as portable pH meters, SC meters, etc.), indicate "PA" in the appropriate test method used box.
- Make additional copies of this form as necessary.

NAME OF PERSON COLLECTING SAMPLE(S): Tony Lester

TITLE: Operations Supervisor

SIGNATURE: 

DESCRIBE DISCHARGE LOCATION Example: NW Out Fall	DATE/TIME OF SAMPLE COLLECTION	TIME DISCHARGE STARTED	ANALYTICAL RESULTS For First Storm Event									
			BASIC PARAMETERS					OTHER PARAMETERS				
			pH	TSS	SC	O&G	TOC	Aluminum	Iron	Lead	Zinc	
SW-2	<u>11/17/2012</u> <input type="checkbox"/> AM 1200 <input checked="" type="checkbox"/> PM	<u>NR</u> <input type="checkbox"/> AM <input type="checkbox"/> PM		210	190	< 5.1	6.2	3.2	15	0.035	0.22	
SW-4	<u>11/17/2012</u> <input type="checkbox"/> AM 1310 <input checked="" type="checkbox"/> PM	<u>NR</u> <input type="checkbox"/> AM <input type="checkbox"/> PM		60	510	< 5.0	5.4	0.97	2.7	0.048	0.22	
SW-5	<u>11/17/2012</u> <input type="checkbox"/> AM 1349 <input checked="" type="checkbox"/> PM	<u>NR</u> <input type="checkbox"/> AM <input type="checkbox"/> PM		31	110	< 5.0	7.7	0.7	1.8	0.032	0.17	
	<u>      </u> <input type="checkbox"/> AM <input type="checkbox"/> PM	<u>      </u> <input type="checkbox"/> AM <input type="checkbox"/> PM										
TEST REPORTING UNITS:			pH Units	mg/l	umho/cm	mg/l	mg/l	mg/L	mg/L	mg/L	mg/L	
TEST METHOD DETECTION LIMIT:				10-36	10	5.0 - 5.1	1.0	0.20	0.20	0.0050	0.020	
TEST METHOD USED:				SM2540D	SM2510B	E1664A	SM5310C	E200.7	E200.7	E200.7	E200.7	
ANALYZED BY (SELF/LAB):				lab	lab	lab	lab	lab	lab	lab	lab	

TSS - Total Suspended Solids

SC - Specific Conductance

O&G - Oil & Grease

TOC - Total Organic Carbon

NR - not recorded

Please see attached tables for other parameter results from this sampling and analysis.



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SIDE B

FORM 1-SAMPLING & ANALYSIS RESULTS

SECOND STORM EVENT

- If analytical results are less than the detection limit (or non detectable), show the value as less than the numerical value of the detection limit (example: <.05)
- If you did not analyze for a required parameter, do not report "0". Instead, leave the appropriate box blank
- When analysis is done using portable analysis (such as portable pH meters, SC meters, etc.), indicate "PA" in the appropriate test method used box.
- Make additional copies of this form as necessary.

NAME OF PERSON COLLECTING SAMPLE(S): Tony Lester

TITLE: Operations Supervisor

SIGNATURE: 

DESCRIBE DISCHARGE LOCATION Example: NW Out Fall	DATE/TIME OF SAMPLE COLLECTION	TIME DISCHARGE STARTED	ANALYTICAL RESULTS For First Storm Event									
			BASIC PARAMETERS					OTHER PARAMETERS				
			pH	TSS	SC	O&G	TOC	Aluminum	Iron	Lead	Zinc	
SW-4	<u>11/28/2012</u> <input type="checkbox"/> AM 1430 <input checked="" type="checkbox"/> PM	NR <input type="checkbox"/> AM <input type="checkbox"/> PM	8.13	190	380	< 5.0	2.5	0.6	2.1	0.016	0.097	
	<input type="checkbox"/> AM <input type="checkbox"/> PM	<input type="checkbox"/> AM <input type="checkbox"/> PM										
	<input type="checkbox"/> AM <input type="checkbox"/> PM	<input type="checkbox"/> AM <input type="checkbox"/> PM										
	<input type="checkbox"/> AM <input type="checkbox"/> PM	<input type="checkbox"/> AM <input type="checkbox"/> PM										
TEST REPORTING UNITS:			pH Units	mg/l	umho/cm	mg/l	mg/l	mg/L	mg/L	mg/L	mg/L	
TEST METHOD DETECTION LIMIT:			2.0	10	2.0	5.0	0.5	0.30	0.10	0.015	0.010	
TEST METHOD USED:			SM4500H B	E160.2	E120.1	E1664A	E415.1	E200.7	E200.7	E200.7	E200.7	
ANALYZED BY (SELF/LAB):			lab	lab	lab	lab	lab	lab	lab	lab	lab	

TSS - Total Suspended Solids

SC - Specific Conductance

O&G - Oil & Grease

TOC - Total Organic Carbon

NR - not recorded

Please see attached tables for other parameter results from this sampling and analysis.

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SIDE B

FORM 1-SAMPLING & ANALYSIS RESULTS

SECOND STORM EVENT

- If analytical results are less than the detection limit (or non detectable), show the value as less than the numerical value of the detection limit (example: <.05)
- If you did not analyze for a required parameter, do not report "0". Instead, leave the appropriate box blank
- When analysis is done using portable analysis (such as portable pH meters, SC meters, etc.), indicate "PA" in the appropriate test method used box.
- Make additional copies of this form as necessary.

NAME OF PERSON COLLECTING SAMPLE(S): Tony Lester

TITLE: Operations Supervisor

SIGNATURE: R. A. Lester

DESCRIBE DISCHARGE LOCATION Example: NW Out Fall	DATE/TIME OF SAMPLE COLLECTION	TIME DISCHARGE STARTED	ANALYTICAL RESULTS For First Storm Event									
			BASIC PARAMETERS					OTHER PARAMETERS				
			pH	TSS	SC	O&G	TOC	Aluminum	Iron	Lead	Zinc	
SW-4	<u>12/15/2012</u> <input type="checkbox"/> AM 1815 <input checked="" type="checkbox"/> PM	<input type="checkbox"/> AM 1800 <input checked="" type="checkbox"/> PM	7.3	34	1,430	< 4.52	6.4	0.17	0.51	0.0072	0.071	
	<input type="checkbox"/> AM <input type="checkbox"/> PM	<input type="checkbox"/> AM <input type="checkbox"/> PM										
	<input type="checkbox"/> AM <input type="checkbox"/> PM	<input type="checkbox"/> AM <input type="checkbox"/> PM										
	<input type="checkbox"/> AM <input type="checkbox"/> PM	<input type="checkbox"/> AM <input type="checkbox"/> PM										
TEST REPORTING UNITS:			pH Units	mg/l	umho/cm	mg/l	mg/l	mg/L	mg/L	mg/L	mg/L	
TEST METHOD DETECTION LIMIT:			1.0	5	1.0	4.52	0.50	0.10	0.10	0.005	0.020	
TEST METHOD USED:			SM4500H B	E160.2	SM2510B	E1664A	SM5310C	EPA 6010B	EPA 6010B	EPA 6010B	EPA 6010B	
ANALYZED BY (SELF/LAB):			lab	lab	lab	lab	lab	lab	lab	lab	lab	

TSS - Total Suspended Solids

SC - Specific Conductance

O&G - Oil & Grease

TOC - Total Organic Carbon

Please see attached tables for other parameter results from this sampling and analysis.



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SIDE B

FORM 1-SAMPLING & ANALYSIS RESULTS

SECOND STORM EVENT

- If analytical results are less than the detection limit (or non detectable), show the value as less than the numerical value of the detection limit (example: <.05)
- If you did not analyze for a required parameter, do not report "0". Instead, leave the appropriate box blank

- When analysis is done using portable analysis (such as portable pH meters, SC meters, etc.), indicate "PA" in the appropriate test method used box.
- Make additional copies of this form as necessary.

NAME OF PERSON COLLECTING SAMPLE(S): Tony Lester

TITLE: Operations Supervisor

SIGNATURE: 

DESCRIBE DISCHARGE LOCATION Example: NW Out Fall	DATE/TIME OF SAMPLE COLLECTION	TIME DISCHARGE STARTED	ANALYTICAL RESULTS For First Storm Event									
			BASIC PARAMETERS					OTHER PARAMETERS				
			pH	TSS	SC	O&G	TOC	Aluminum	Iron	Lead	Zinc	
SW-1	<u>12/21/2012</u> NR <input type="checkbox"/> AM <input type="checkbox"/> PM	<u>1045</u> <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM	7.2	140	160	38.8	5.9	2.6	6.8	0.41	2.4	
SW-2	<u>12/21/2012</u> NR <input type="checkbox"/> AM <input type="checkbox"/> PM	<u>1045</u> <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM	8.1	440	270	15.1	8.1	1.9	8.1	0.41	2.7	
SW-3	<u>12/21/2012</u> NR <input type="checkbox"/> AM <input type="checkbox"/> PM	<u>1045</u> <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM	7.3	110	1,940	< 4.70	3.1	0.39	1.1	0.013	0.14	
SW-4	<u>12/21/2012</u> NR <input type="checkbox"/> AM <input type="checkbox"/> PM	<u>1045</u> <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM	7.1	30	1,320	< 4.70	5.9	0.35	0.87	0.013	0.10	
TEST REPORTING UNITS:			pH Units	mg/l	umho/cm	mg/l	mg/l	mg/L	mg/L	mg/L	mg/L	
TEST METHOD DETECTION LIMIT:			1.0	5	1.0	4.70	0.50	0.050	0.050	0.001	0.02 - 0.2	
TEST METHOD USED:			SM4500H B	E160.2	SM2510B	E1664A	SM5310C	E200.8	E200.8	E200.8	E200.8	
ANALYZED BY (SELF/LAB):			lab	lab	lab	lab	lab	lab	lab	lab	lab	

TSS - Total Suspended Solids

SC - Specific Conductance

O&G - Oil & Grease

TOC - Total Organic Carbon

NR - not recorded

Please see attached tables for other parameter results from this sampling and analysis.

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SIDE B

FORM 1-SAMPLING & ANALYSIS RESULTS

SECOND STORM EVENT

- If analytical results are less than the detection limit (or non detectable), show the value as less than the numerical value of the detection limit (example: <.05)
- If you did not analyze for a required parameter, do not report "0". Instead, leave the appropriate box blank
- When analysis is done using portable analysis (such as portable pH meters, SC meters, etc.), indicate "PA" in the appropriate test method used box.
- Make additional copies of this form as necessary.

NAME OF PERSON COLLECTING SAMPLE(S): Tony Lester

TITLE: Operations Supervisor

SIGNATURE: R.A. Lester

DESCRIBE DISCHARGE LOCATION Example: NW Out Fall	DATE/TIME OF SAMPLE COLLECTION	TIME DISCHARGE STARTED	ANALYTICAL RESULTS For First Storm Event									
			BASIC PARAMETERS					OTHER PARAMETERS				
			pH	TSS	SC	O&G	TOC	Aluminum	Iron	Lead	Zinc	
SW-5	<u>12/21/2012</u> NR <input type="checkbox"/> AM <input type="checkbox"/> PM	<u>1045</u> <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM	6.5	11	110	< 4.70	2.6	0.15	0.31	0.0059	0.054	
SW-6	<u>12/21/2012</u> NR <input type="checkbox"/> AM <input type="checkbox"/> PM	<u>1045</u> <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM	6.6	9	460	< 4.70	2.2	0.19	0.54	0.0044	0.058	
SW-7	<u>12/21/2012</u> 1416 <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	<u>1045</u> <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM	7.4	9	4,650	< 4.70	3.6	0.21	0.52	0.0035	0.046	
SW-11	<u>12/21/2012</u> 1241 <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	<u>1045</u> <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM	7.7	210	590	< 4.70	2.4	0.60	0.97	0.011	0.087	
TEST REPORTING UNITS:			pH Units	mg/l	umho/cm	mg/l	mg/l	mg/L	mg/L	mg/L	mg/L	
TEST METHOD DETECTION LIMIT:			1.0	5	1.0	4.70	0.50	0.050	0.050	0.001	0.02	
TEST METHOD USED:			SM4500H B	E160.2	SM2510B	E1664A	SM5310C	E200.8	E200.8	E200.8	E200.8	
ANALYZED BY (SELF/LAB):			lab	lab	lab	lab	lab	lab	lab	lab	lab	

TSS - Total Suspended Solids

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NR - not recorded

Please see attached tables for other parameter results from this sampling and analysis.



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FORM 1-SAMPLING & ANALYSIS RESULTS

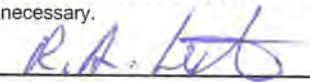
SECOND STORM EVENT

- If analytical results are less than the detection limit (or non detectable), show the value as less than the numerical value of the detection limit (example: <.05)
- If you did not analyze for a required parameter, do not report "0". Instead, leave the appropriate box blank
- When analysis is done using portable analysis (such as portable pH meters, SC meters, etc.), indicate "PA" in the appropriate test method used box.
- Make additional copies of this form as necessary.

NAME OF PERSON COLLECTING SAMPLE(S): Tony Lester

TITLE: Operations Supervisor

SIGNATURE:



DESCRIBE DISCHARGE LOCATION Example: NW Out Fall	DATE/TIME OF SAMPLE COLLECTION	TIME DISCHARGE STARTED	ANALYTICAL RESULTS For First Storm Event									
			BASIC PARAMETERS					OTHER PARAMETERS				
			pH	TSS	SC	O&G	TOC	Aluminum	Iron	Lead	Zinc	
SW-12	12/21/2012 1321 <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	1045 <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM	6.8	15	97	< 4.70	2.7	1.1	1.1	0.038	0.14	
	<input type="checkbox"/> AM <input type="checkbox"/> PM	<input type="checkbox"/> AM <input type="checkbox"/> PM										
	<input type="checkbox"/> AM <input type="checkbox"/> PM	<input type="checkbox"/> AM <input type="checkbox"/> PM										
	<input type="checkbox"/> AM <input type="checkbox"/> PM	<input type="checkbox"/> AM <input type="checkbox"/> PM										
TEST REPORTING UNITS:			pH Units	mg/l	umho/cm	mg/l	mg/l	mg/L	mg/L	mg/L	mg/L	
TEST METHOD DETECTION LIMIT:			1.0	5	1.0	4.70	0.50	0.050	0.050	0.001	0.02	
TEST METHOD USED:			SM4500H B	E160.2	SM2510B	E1664A	SM5310C	E200.8	E200.8	E200.8	E200.8	
ANALYZED BY (SELF/LAB):			lab	lab	lab	lab	lab	lab	lab	lab	lab	

TSS - Total Suspended Solids

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Please see attached tables for other parameter results from this sampling and analysis.

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FORM 1-SAMPLING & ANALYSIS RESULTS

SECOND STORM EVENT

- If analytical results are less than the detection limit (or non detectable), show the value as less than the numerical value of the detection limit (example: <.05)
- If you did not analyze for a required parameter, do not report "0". Instead, leave the appropriate box blank
- When analysis is done using portable analysis (such as portable pH meters, SC meters, etc.), indicate "PA" in the appropriate test method used box.
- Make additional copies of this form as necessary.

NAME OF PERSON COLLECTING SAMPLE(S): Ian Wren TITLE: Environmental Scientist SIGNATURE: NA

DESCRIBE DISCHARGE LOCATION Example: NW Out Fall	DATE/TIME OF SAMPLE COLLECTION	TIME DISCHARGE STARTED	ANALYTICAL RESULTS For First Storm Event									
			BASIC PARAMETERS					OTHER PARAMETERS				
			pH	TSS	SC	O&G	TOC	Aluminum	Iron	Lead	Zinc	
SW-4	<u>2/19/2013</u> <input checked="" type="checkbox"/> AM 10:40 <input type="checkbox"/> PM	<u>NR</u> <input type="checkbox"/> AM <input type="checkbox"/> PM		38		< 5.0		0.093	0.48	0.0048	0.073	
	<u>      </u> <input type="checkbox"/> AM <input type="checkbox"/> PM	<u>      </u> <input type="checkbox"/> AM <input type="checkbox"/> PM										
	<u>      </u> <input type="checkbox"/> AM <input type="checkbox"/> PM	<u>      </u> <input type="checkbox"/> AM <input type="checkbox"/> PM										
	<u>      </u> <input type="checkbox"/> AM <input type="checkbox"/> PM	<u>      </u> <input type="checkbox"/> AM <input type="checkbox"/> PM										
TEST REPORTING UNITS:			pH Units	mg/l	umho/cm	mg/l	mg/l	mg/L	mg/L	mg/L	mg/L	
TEST METHOD DETECTION LIMIT:				5		5.0		0.05	0.05	0.001	0.020	
TEST METHOD USED:				E160.2		E1664A		EPA 6020	EPA 6020	EPA 6020	EPA 6020	
ANALYZED BY (SELF/LAB):				lab		lab		lab	lab	lab	lab	

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NR - not recorded

Please see attached tables for other parameter results from this sampling and analysis.

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SIDE B

FORM 1-SAMPLING & ANALYSIS RESULTS

SECOND STORM EVENT

- If analytical results are less than the detection limit (or non detectable), show the value as less than the numerical value of the detection limit (example: <.05)
- If you did not analyze for a required parameter, do not report "0". Instead, leave the appropriate box blank
- When analysis is done using portable analysis (such as portable pH meters, SC meters, etc.), indicate "PA" in the appropriate test method used box.
- Make additional copies of this form as necessary.

NAME OF PERSON COLLECTING SAMPLE(S): Tony Lester

TITLE: Operations Supervisor

SIGNATURE: 

DESCRIBE DISCHARGE LOCATION Example: NW Out Fall	DATE/TIME OF SAMPLE COLLECTION	TIME DISCHARGE STARTED	ANALYTICAL RESULTS For First Storm Event									
			BASIC PARAMETERS					OTHER PARAMETERS				
			pH	TSS	SC	O&G	TOC	Aluminum	Iron	Lead	Zinc	
SW-2	<u>4/4/2013</u> <input checked="" type="checkbox"/> AM 0920 <input type="checkbox"/> PM	NR <input type="checkbox"/> AM <input type="checkbox"/> PM	8.61	140	147			1.9	6.7	0.075	0.41	
SW-11	<u>4/4/2013</u> <input checked="" type="checkbox"/> AM 0755 <input type="checkbox"/> PM	NR <input type="checkbox"/> AM <input type="checkbox"/> PM	8.25	46	179			0.30	0.56	0.0024	0.033	
	<input type="checkbox"/> AM <input type="checkbox"/> PM	<input type="checkbox"/> AM <input type="checkbox"/> PM										
	<input type="checkbox"/> AM <input type="checkbox"/> PM	<input type="checkbox"/> AM <input type="checkbox"/> PM										
TEST REPORTING UNITS:			pH Units	mg/l	umho/cm	mg/l	mg/l	mg/L	mg/L	mg/L	mg/L	
TEST METHOD DETECTION LIMIT:				10		NA	NA	0.010	0.020	0.0010	0.020	
TEST METHOD USED:			PA	SM2540D	PA	NA	NA	E200.8	E200.8	E200.8	E200.8	
ANALYZED BY (SELF/LAB):			self	lab	self	NA	NA	lab	lab	lab	lab	

TSS - Total Suspended Solids

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NR-not recorded

Please see attached tables for other parameter results from this sampling and analysis.



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SIDE A

FORM 2-QUARTERLY VISUAL OBSERVATIONS OF AUTHORIZED  
NON-STORM WATER DISCHARGES (NSWDs)

- Quarterly dry weather visual observations are required of each authorized NSWD.
- Observe each authorized NSWD source, impacted drainage area, and discharge location.
- Authorized NSWDs must meet the conditions provided in Section D (pages 5-6) of the General Permit.
- Make additional copies of this form as necessary.

QUARTER: <b>JULY-SEPT.</b>  DATE: <u>8/24/2012</u>	Observers Name: <u>Helen Mawhinney</u>  Title: <u>Senior Environmental Specialist</u>  Signature: <u><i>Helen Mawhinney</i></u>	WERE ANY AUTHORIZED NSWDs DISCHARGED DURING THIS QUARTER? <input type="checkbox"/> YES If YES, complete reverse side of this form. <input checked="" type="checkbox"/> NO
QUARTER: <b>OCT.-DEC.</b>  DATE: <u>12/21/2012</u>	Observers Name: <u>Helen Mawhinney</u>  Title: <u>Senior Environmental Specialist</u>  Signature: <u><i>Helen Mawhinney</i></u>	WERE ANY AUTHORIZED NSWDs DISCHARGED DURING THIS QUARTER? <input type="checkbox"/> YES If YES, complete reverse side of this form. <input checked="" type="checkbox"/> NO
QUARTER: <b>JAN.-MARCH</b>  DATE: <u>3/25/2013</u>	Observers Name: <u>Helen Mawhinney</u>  Title: <u>Senior Environmental Specialist</u>  Signature: <u><i>Helen Mawhinney</i></u>	WERE ANY AUTHORIZED NSWDs DISCHARGED DURING THIS QUARTER? <input type="checkbox"/> YES If YES, complete reverse side of this form. <input checked="" type="checkbox"/> NO
QUARTER: <b>APRIL-JUNE</b>  DATE: <u>5/16/2013</u>	Observers Name: <u>Helen Mawhinney</u>  Title: <u>Senior Environmental Specialist</u>  Signature: <u><i>Helen Mawhinney</i></u>	WERE ANY AUTHORIZED NSWDs DISCHARGED DURING THIS QUARTER? <input type="checkbox"/> YES If YES, complete reverse side of this form. <input checked="" type="checkbox"/> NO



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SIDE A

**FORM 3-QUARTERLY VISUAL OBSERVATIONS OF UNAUTHORIZED  
NON-STORM WATER DISCHARGES (NSWDs)**

- Unauthorized NSWDs are discharges (such as wash or rinse waters) that do not meet the conditions provided in Section D (pages 5-6) of the General Permit.
- Quarterly visual observations are required to observe current and detect prior unauthorized NSWDs.
- Quarterly visual observations are required during dry weather and at all facility drainage areas.
- Each unauthorized NSWD source, impacted drainage area, and discharge location must be identified and observed.
- Unauthorized NSWDs that can not be eliminated within 90 days of observation must be reported to the Regional Board in accordance with Section A.10.e of the General Permit.
- Make additional copies of this form as necessary.

<b>QUARTER: JULY-SEPT.</b>  <b>DATE/TIME OF OBSERVATIONS</b> <u>8/24/12</u> <u>10:35</u> <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM	<b>Observers Name:</b> <u>Helen Mawhinney</u> <b>Title:</b> <u>Senior Environmental Specialist</u> <b>Signature:</b> <u><i>Helen Mawhinney</i></u>	<b>WERE UNAUTHORIZED NSWDs OBSERVED?</b> <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO <b>WERE THERE INDICATIONS OF PRIOR UNAUTHORIZED NSWDs?</b> <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO If YES to either question, complete reverse side.
<b>QUARTER: OCT.-DEC.</b>  <b>DATE/TIME OF OBSERVATIONS</b> <u>12/5/12</u> <u>9:00</u> <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM	<b>Observers Name:</b> <u>Tony Lester</u> <b>Title:</b> <u>Operations Supervisor</u> <b>Signature:</b> <u><i>T. A. Lester</i></u>	<b>WERE UNAUTHORIZED NSWDs OBSERVED?</b> <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <b>WERE THERE INDICATIONS OF PRIOR UNAUTHORIZED NSWDs?</b> <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO If YES to either question, complete reverse side.
<b>QUARTER: JAN.-MARCH</b>  <b>DATE/TIME OF OBSERVATIONS</b> <u>3/25/13</u> <u>11:45</u> <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM	<b>Observers Name:</b> <u>Helen Mawhinney</u> <b>Title:</b> <u>Senior Environmental Specialist</u> <b>Signature:</b> <u><i>Helen Mawhinney</i></u>	<b>WERE UNAUTHORIZED NSWDs OBSERVED?</b> <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO <b>WERE THERE INDICATIONS OF PRIOR UNAUTHORIZED NSWDs?</b> <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO If YES to either question, complete reverse side.
<b>QUARTER: APRIL-JUNE</b>  <b>DATE/TIME OF OBSERVATIONS</b> <u>5/16/13</u> <u>10:44</u> <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM	<b>Observers Name:</b> <u>Helen Mawhinney</u> <b>Title:</b> <u>Senior Environmental Specialist</u> <b>Signature:</b> <u><i>Helen Mawhinney</i></u>	<b>WERE UNAUTHORIZED NSWDs OBSERVED?</b> <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO <b>WERE THERE INDICATIONS OF PRIOR UNAUTHORIZED NSWDs?</b> <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO If YES to either question, complete reverse side.

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SIDE B

FORM 3 QUARTERLY VISUAL OBSERVATIONS OF UNAUTHORIZED  
NON-STORM WATER DISCHARGES (NSWDs)

OBSERVATION DATE (FROM REVERSE SIDE)	NAME OF UNAUTHORIZED NSWD  <u>EXAMPLE:</u> Vehicle Wash Water	SOURCE AND LOCATION OF UNAUTHORIZED NSWD  <u>EXAMPLE:</u> NW Corner of Parking Lot	DESCRIBE UNAUTHORIZED NSWD CHARACTERISTICS  Indicate whether unauthorized NSWD is clear, cloudy, discolored, causing stains; contains floating objects or an oil sheen, has odors, etc.		DESCRIBE CORRECTIVE ACTIONS TO ELIMINATE UNAUTHORIZED NSWD AND TO CLEAN IMPACTED DRAINAGE AREAS. PROVIDE UNAUTHORIZED NSWD ELIMINATION DATE.
			AT THE UNAUTHORIZED NSWD SOURCE	AT THE UNAUTHORIZED NSWD AREA AND DISCHARGE LOCATION	
<u>12/5/2012</u>  9:00 <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM	12/5/2012 - Municipal supply water used for spraying down paved ground surface.	North Parr Yard, near interceptor SW-12	LRT supervisor observed project materials and runoff at NSWD source.	Not recorded by LRT supervisor.	LRT supervisor stopped employee from using water to wash the paved surface. Discharge eliminated on 12/5/2012.
<u>5/16/2013</u>  10:44 <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM	See Attachment B - Additional Explanations.				
_____  _____  <input type="checkbox"/> AM <input type="checkbox"/> PM					
_____  _____  <input type="checkbox"/> AM <input type="checkbox"/> PM					



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FORM 4 - MONTHLY VISUAL OBSERVATIONS OF STORM WATER DISCHARGES**

- Storm water discharge visual observations are required for at least one storm event per month between October 1 and May 31.  
- Visual observations must be conducted during the first hour of discharge at all discharge locations.  
- Discharges of temporarily stored or contained storm water must be observed at the time of discharge.  
- Indicate "None" in the first column of this form if you did not conduct a monthly visual observation.

- Make additional copies of this form as necessary.  
- Until a monthly visual observation is made, record any eligible storm events that do not result in a storm water discharge and note the date, time, name, and title of who observed there was no storm water discharge.

Drainage Location Description:			SW-1	SW-2	SW-3	SW-4	SW-5	SW-6	SW-7	SW-10	SW-11	SW-12
Observation Date:	October 22, 2012	Observation Time:	7:00 AM	8:00 AM	9:20 AM	9:00 AM	9:30 AM	7:00:00 AM - 10:30 AM	7:00:00 AM - 10:30 AM	7:00:00 AM - 10:30 AM	10:00 AM	10:30 AM
Observer's Name:	Helen Mawhinney	Time Discharge Began:	NR	NR	NR	NR	NR	No discharge	No discharge	No discharge	NR	NR
Title:	Senior Environmental Specialist	Approximate storm start date and time:	10/21/2012 11:00 PM									
Signature:	<i>Helen Mawhinney</i>	Were Pollutants Observed (if yes, complete reverse side):	yes	yes	yes	yes	yes	no <sup>(1)</sup>	no <sup>(1)</sup>	no <sup>(1)</sup>	yes	yes
Observations Date:	November 21, 2012	Observation Time:	6:35 PM	9:00 AM	6:35 PM	6:35 PM	8:50 AM	6:35 PM	6:35 PM	6:35 PM	7:31 AM	7:59 AM
Observer's Name:	Helen Mawhinney	Time Discharge Began:	No discharge	NR	No discharge	No discharge	NR	No discharge	No discharge	No discharge	NR	NR
Title:	Senior Environmental Specialist	Approximate storm start date and time:	11/16/2012 6:30 AM - First part of storm ended night of 11/18/2012; began raining again on 11/20/2012 at 1:45 PM.									
Signature:	<i>Helen Mawhinney</i>	Were Pollutants Observed (if yes, complete reverse side):	No	No	No	No	No	No	No	No	No	No
Observations Date:	December 21, 2012	Observation Time:	10:45 AM - 4:30 PM	10:45 AM - 4:30 PM	10:45 AM - 4:30 PM	10:45 AM - 4:30 PM	10:45 AM - 4:30 PM	10:45 AM - 4:30 PM	2:15 PM	10:45 AM - 4:30 PM	12:41 PM	1:21 PM
Observer's Name:	Helen Mawhinney	Time Discharge Began:	NR	NR	NR	NR	NR	NR	NR	No discharge	NR	NR
Title:	Senior Environmental Specialist	Approximate storm start date and time:	12/21/2012 9:30 AM									
Signature:	<i>Helen Mawhinney</i>	Were Pollutants Observed (if yes, complete reverse side):	No	No	No	No	No	No	No	No	No	No
Observations Date:	January 15, 2013	Observation Time:	11:55 AM	11:55 AM	11:55 AM	11:55 AM	11:55 AM	11:55 AM	11:55 AM	11:55 AM	11:55 AM	11:55 AM
Observer's Name:	Helen Mawhinney	Time Discharge Began:	No discharge	No discharge	No discharge	No discharge	No discharge	No discharge	No discharge	No discharge	No discharge	No discharge
Title:	Senior Environmental Specialist	Approximate storm start date and time:	No storm									
Signature:	<i>Helen Mawhinney</i>	Were Pollutants Observed (if yes, complete reverse side):	No	No	No	No	No	No	No	No	No	No
Observations Date:	February 19, 2013	Observation Time:	8:50 AM - 9:10 AM	8:50 AM - 9:10 AM	8:50 AM - 9:10 AM	8:50 AM - 9:10 AM	8:50 AM - 9:10 AM	8:50 AM - 9:10 AM	8:50 AM - 9:10 AM	8:50 AM - 9:10 AM	8:50 AM - 9:10 AM	8:50 AM - 9:10 AM
Observer's Name:	Tony Lester	Time Discharge Began:	No discharge	No discharge	No discharge	NR	NR	NR	NR	NR	NR	NR
Title:	Operations Supervisor	Approximate storm start date and time:	2/19/2013 5:30 AM									
Signature:	<i>R. A. Lester</i>	Were Pollutants Observed (if yes, complete reverse side):	no <sup>(2)</sup>	No	No	No	No	No	No	No	No	No
Observations Date:	March 25, 2013	Observation Time:	11:45 AM	11:45 AM	11:45 AM	11:45 AM	11:45 AM	11:45 AM	11:45 AM	11:45 AM	11:45 AM	11:45 AM
Observer's Name:	Helen Mawhinney	Time Discharge Began:	No discharge	No discharge	No discharge	No discharge	No discharge	No discharge	No discharge	No discharge	No discharge	No discharge
Title:	Senior Environmental Specialist	Approximate storm start date and time:	No storm									
Signature:	<i>Helen Mawhinney</i>	Were Pollutants Observed (if yes, complete reverse side):	No	No	No	No	No	No	No	No	No	No
Observations Date:	April 4, 2013	Observation Time:	6:00 AM - 6:30 AM	6:00 AM - 6:30 AM	6:00 AM - 6:30 AM	6:00 AM - 6:30 AM	6:00 AM - 6:30 AM	6:00 AM - 6:30 AM	6:00 AM - 6:30 AM	Not observed	6:00 AM - 6:30 AM	6:00 AM - 6:30 AM
Observer's Name:	Tony Lester	Time Discharge Began:	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Title:	Operations Supervisor	Approximate storm start date and time:	3/30/2013 7:30 PM - First part of storm ended morning of 4/2/2013; began raining again on 4/4/2013 at 2:30 AM.									
Signature:	<i>R. A. Lester</i>	Were Pollutants Observed (if yes, complete reverse side):	Yes	Yes	No	No	No	No	No	NA	Yes	Yes
Observations Date:	May 16, 2013	Observation Time:	10:44 AM	10:44 AM	10:44 AM	10:44 AM	10:44 AM	10:44 AM	10:44 AM	10:44 AM	10:44 AM	10:44 AM
Observer's Name:	Helen Mawhinney	Time Discharge Began:	No discharge	No discharge	No discharge	No discharge	No discharge	No discharge	No discharge	No discharge	No discharge	No discharge
Title:	Senior Environmental Specialist	Approximate storm start date and time:	No storm producing discharge. Light sprinkling observed on 5/16/2013.									
Signature:	<i>Helen Mawhinney</i>	Were Pollutants Observed (if yes, complete reverse side):	No	No	No	no <sup>(3)</sup>	No	No	No	no <sup>(3)</sup>	No	No

NA = not applicable NR = not recorded

(1) During the October 22, 2012 monthly discharge observation, a sheen was observed on water collected in interceptors SW-6, SW-7, and SW-10; however, no sediment, staining, or odor was observed. No discharge occurred from these interceptors.

(2) During the February 19, 2013 monthly discharge observation, water collected in the SW-2 interceptor was not clear, but no staining, sediments, odors, or sheens were observed. This storm water was not discharged, it was contained in a Baker Tank for subsequent discharge to the sanitary sewer.

(3) During the May 16, 2013 monthly discharge observation, water collected in interceptor SW-4 exhibited sediment and water in SW-10 was not clear; however, no staining, odor, or sheen was observed. No discharge occurred from these interceptors.

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FORM 4 (continued) - MONTHLY VISUAL OBSERVATIONS OF STORM WATER DISCHARGES**

	Drainage Location Description:	Describe Storm Water Discharge Characteristics Indicate whether storm water discharge is clear, cloudy, or discolored; causing staining, containing floating objects or an oil sheen, has odors, etc.	Identify and Describe Source(s) of Pollutants	Describe any revised or new BMPs and their date of implementation
<b>Observation Date and Time:</b> October 22, 2012 07:00 AM	SW-1	Sheen was noted on water in interceptor; however, water was observed to be clear. No staining, sediment, or odor was observed.	Not identified	BMPs were revised as follows in the fall of 2012: <ul style="list-style-type: none"> <li>- Increased frequency of streetsweeping in the main yard to reduce tracking and prevent sediments entering storm drainage system.</li> <li>- Added secondary walls inside the material storage warehouse to contain stored materials and prevent tracking.</li> <li>- Portions of the A-berth were paved to enhance site drainage toward the interceptors.</li> <li>- Increased use of filter fabrics installed on drain inlets throughout main yard, and deployed sediment control devices around drain inlets where feasible.</li> <li>- Storage tanks installed for storm water discharged from SW-1 in order to increase the volume of storm water for permitted discharge to City of Richmond sanitary sewer system.</li> <li>- A normally closed valve was installed on the SW-1 discharge line to control discharge from the interceptor.</li> <li>- A fabric filter was added to the discharge pipe at SW-1.</li> </ul>
<b>Observation Date and Time:</b> October 22, 2012 08:00 AM	SW-2	Sheen was noted on water in interceptor. Water did not appear clear and sediment was observed. No staining or odor was observed.	Not identified	BMPs were revised as follows in the fall of 2012: <ul style="list-style-type: none"> <li>- Increased frequency of streetsweeping in the main yard to reduce tracking and prevent sediments entering storm drainage system.</li> <li>- Added secondary walls inside the material storage warehouse to contain stored materials and prevent tracking.</li> <li>- Increased use of filter fabrics installed on drain inlets throughout main yard, and deployed sediment control devices around drain inlets where feasible.</li> <li>- Storage tanks installed for storm water discharged from SW-2 in order to increase the volume of storm water for permitted discharge to City of Richmond sanitary sewer system.</li> <li>- A normally closed valve was installed on the SW-2 discharge line to control discharge from the interceptor.</li> <li>- Conveyors were modified to increase coverage of handled material and prevent material spillage.</li> <li>- Dust suppression misters installed along conveyors.</li> </ul>
<b>Observation Date and Time:</b> October 22, 2012 09:20 AM	SW-3	Sheen was noted on water in interceptor; however, water was observed to be clear. No staining, sediment, or odor was observed.	Not identified	BMPs were revised as follows in the fall of 2012: <ul style="list-style-type: none"> <li>- Increased frequency of streetsweeping in the main yard to reduce tracking and prevent sediments entering storm drainage system.</li> <li>- Increased use of filter fabrics installed on drain inlets throughout main yard, and deployed sediment control devices around drain inlets where feasible.</li> <li>- Storage tanks installed for storm water discharged from SW-3 in order to increase the volume of storm water for permitted discharge to City of Richmond sanitary sewer system.</li> <li>- A normally closed valve was installed on the SW-3 discharge line to control discharge from the interceptor.</li> <li>- Conveyors were modified to increase coverage of handled material and prevent material spillage.</li> <li>- Dust suppression misters installed along conveyors and at the Hopper Building.</li> </ul>
<b>Observation Date and Time:</b> October 22, 2012 09:00 AM	SW-4	Sheen was noted on water in interceptor; however, water was observed to be clear. No staining, sediment, or odor was observed.	Not identified	BMPs were revised as follows in the fall of 2012: <ul style="list-style-type: none"> <li>- Increased frequency of streetsweeping in the main yard to reduce tracking and prevent sediments entering storm drainage system.</li> <li>- Increased use of filter fabrics installed on drain inlets throughout main yard, and deployed sediment control devices around drain inlets where feasible.</li> <li>- A normally closed valve was installed on the SW-4 discharge line to control discharge from the interceptor.</li> <li>- When possible, accumulated water in interceptors SW-4 is pumped out for re-use onsite (e.g., dust suppression) or discharged to the City of Richmond sanitary sewer under permit.</li> <li>- A fabric filter was added to the discharge pipe at SW-4.</li> </ul>

**2012 - 2013  
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FORM 4 (continued) - MONTHLY VISUAL OBSERVATIONS OF STORM WATER DISCHARGES**


	Drainage Location Description:	Describe Storm Water Discharge Characteristics Indicate whether storm water discharge is clear, cloudy, or discolored; causing staining, containing floating objects or an oil sheen, has odors, etc.	Identify and Describe Source(s) of Pollutants	Describe any revised or new BMPs and their date of implementation
<b>Observation Date and Time:</b> October 22, 2012 09:30 AM	SW-5	Sheen was noted on water in interceptor; however, water was observed to be clear. No staining, sediment, or odor was observed.	Not identified	BMPs were revised as follows in the fall of 2012: - Increased frequency of streetsweeping in the main yard to reduce tracking and prevent sediments entering storm drainage system. - Increased use of filter fabrics installed on drain inlets throughout main yard, and deployed sediment control devices around drain inlets where feasible. - A normally closed valve was installed on the SW-5 discharge line to control discharge from the interceptor. - When possible, accumulated water in interceptors SW-5 is pumped out for re-use onsite (e.g., dust suppression) or discharged to the City of Richmond sanitary sewer under permit. - A fabric filter was added to the discharge pipe at SW-5.
<b>Observation Date and Time:</b> October 22, 2012 10:00 AM	SW-11	Sheen was noted on water in interceptor; however, water was observed to be clear. No staining, sediment, or odor was observed.	Not identified	BMPs were revised as follows in the fall of 2012: - Increased frequency of streetsweeping in the South Parr Yard (SW-11 drainage area) to reduce tracking and prevent sediments entering storm drainage system. - Filter media were added to drain inlets along the western swale of the drainage area. Filter fabrics installed at other drain inlets. - Stacked shipping containers were installed around material stockpiles to serve as windbreaks and to prevent material tracking. Water mister was installed on shipping container wall for dust suppression.
<b>Observation Date and Time:</b> October 22, 2012 10:30 AM	SW-12	Sheen was noted on water in interceptor; however, water was observed to be clear. No staining, sediment, or odor was observed.	Not identified	BMPs were revised as follows in the fall of 2012: - Increased frequency of streetsweeping in the North Parr Yard to reduce tracking and prevent sediments entering storm drainage system. The following Improvements were made in the winter of 2013: - Improvements to site drainage in the North Parr Yard were made through installation of a new, graded concrete surface in the north-east section of the yard. - Drainage system improvements included additional drain inlets installed along drainage swale and junction box at SW-12. Filter fabrics added to drain inlets.
<b>Observation Date and Time:</b> April 4, 2013 6:00 - 6:30 AM	SW-1	Water in interceptor showed signs of staining; however, the water was observed to be clear. No sediment, odor, or sheen was observed.	Not identified	BMPs were revised as follows in the winter of 2013: - A new concrete curb/berm along the eastern alley fence was installed in sections where there was potential to receive sediment from adjacent, unimproved surfaces. - Improved housekeeping performed along the eastern alley to remove stored equipment/materials and increase accessibility for streetsweeper.
<b>Observation Date and Time:</b> April 4, 2013 6:00 - 6:30 AM	SW-2	Water in interceptor showed signs of staining; however, the water was observed to be clear. Sediment was observed. No odor or sheen was observed.	Not identified	See previous description for improved BMPs for SW-2.
<b>Observation Date and Time:</b> April 4, 2013 6:00 - 6:30 AM	SW-11	Water in interceptor showed signs of staining; however, the water was observed to be clear. No sediment, odor, or sheen was observed.	Not identified	See previous description for improved BMPs for SW-11.
<b>Observation Date and Time:</b> April 4, 2013 6:00 - 6:30 AM	SW-12	Sheen was observed on water in interceptor; however, the water was observed to be clear. No staining, sediment, or odor was observed.	Not identified	See previous description for improved BMPs for SW-12.



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SIDE A

FORM 5-ANNUAL COMPREHENSIVE SITE COMPLIANCE EVALUATION  
POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY BMP STATUS

EVALUATION DATE: 6/10/13 INSPECTOR NAME: Greg Hulburd, P.E. TITLE: Senior Staff Engineer SIGNATURE: 

<p>POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY AREA (as identified in your SWPPP)</p> <p>South Main Yard Storm Water Interceptor SW-1</p>	<p>HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO</p> <p>ARE ADDITIONAL/REVISED BMPs NECESSARY? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO</p>	<p>If yes, to either question, complete the next two columns of this form</p>	<p>Describe deficiencies in BMPs or BMP implementation</p> <p>Drain inlet protection not in place for storm drain inlet located between main gate and main office building.</p>	<p>Describe additional/revise BMPs or corrective actions and their date(s) of implementation</p> <p>Update Site Plan to show drain inlet located between main gate and main office building. Provide drain inlet protection. Revisions and corrective actions to be implemented during the summer of 2013.</p>
<p>POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY AREA (as identified in your SWPPP)</p> <p>South Main Yard Storm Water Interceptor SW-2</p>	<p>HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO</p> <p>ARE ADDITIONAL/REVISED BMPs NECESSARY? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO</p>	<p>If yes, to either question, complete the next two columns of this form</p>	<p>Describe deficiencies in BMPs or BMP implementation</p>	<p>Describe additional/revise BMPs or corrective actions and their date(s) of implementation</p>
<p>POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY AREA (as identified in your SWPPP)</p> <p>South Main Yard Storm Water Interceptor SW-3</p>	<p>HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO</p> <p>ARE ADDITIONAL/REVISED BMPs NECESSARY? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO</p>	<p>If yes, to either question, complete the next two columns of this form</p>	<p>Describe deficiencies in BMPs or BMP implementation</p>	<p>Describe additional/revise BMPs or corrective actions and their date(s) of implementation</p>
<p>POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY AREA (as identified in your SWPPP)</p> <p>North Main Yard/United Heckathorn Storm Water Interceptor SW-4</p>	<p>HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO</p> <p>ARE ADDITIONAL/REVISED BMPs NECESSARY? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO</p>	<p>If yes, to either question, complete the next two columns of this form</p>	<p>Describe deficiencies in BMPs or BMP implementation</p>	<p>Describe additional/revise BMPs or corrective actions and their date(s) of implementation</p>



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SIDE B

FORM 5 (Continued)-ANNUAL COMPREHENSIVE SITE COMPLIANCE EVALUATION  
POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY BMP STATUS

EVALUATION DATE: 6/10/13

INSPECTOR NAME: Greg Hulburd, P.E.

TITLE: Senior Staff Engineer

SIGNATURE: 

<p>POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY AREA (as identified in your SWPPP)</p> <p>North Main Yard / United Heckathorn Storm Water Interceptor SW-5</p>	<p>HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED?</p> <p><input type="checkbox"/> YES <input checked="" type="checkbox"/> NO</p>	<p>If yes, to either question, complete the next two columns of this form.</p>	<p>Describe deficiencies in BMPs or BMP implementation</p>	<p>Describe additional/revised BMPs or corrective actions and their date(s) of implementation</p>
<p>ARE ADDITIONAL/REVISED BMPs NECESSARY?</p> <p><input type="checkbox"/> YES <input checked="" type="checkbox"/> NO</p>				
<p>POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY AREA (as identified in your SWPPP)</p> <p>North Main Yard / United Heckathorn Storm Water Interceptor SW-6</p>	<p>HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED?</p> <p><input type="checkbox"/> YES <input checked="" type="checkbox"/> NO</p>	<p>If yes, to either question, complete the next two columns of this form.</p>	<p>Describe deficiencies in BMPs or BMP implementation</p>	<p>Describe additional/revised BMPs or corrective actions and their date(s) of implementation</p>
<p>ARE ADDITIONAL/REVISED BMPs NECESSARY?</p> <p><input type="checkbox"/> YES <input checked="" type="checkbox"/> NO</p>				
<p>POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY AREA (as identified in your SWPPP)</p> <p>North Main Yard / United Heckathorn Storm Water Interceptor SW-7</p>	<p>HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED?</p> <p><input type="checkbox"/> YES <input checked="" type="checkbox"/> NO</p>	<p>If yes, to either question, complete the next two columns of this form.</p>	<p>Describe deficiencies in BMPs or BMP implementation</p>	<p>Describe additional/revised BMPs or corrective actions and their date(s) of implementation</p>
<p>ARE ADDITIONAL/REVISED BMPs NECESSARY?</p> <p><input type="checkbox"/> YES <input checked="" type="checkbox"/> NO</p>				
<p>POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY AREA (as identified in your SWPPP)</p> <p>South Parr Yard Storm Water Interceptors SW-10 and SW-11</p>	<p>HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED?</p> <p><input checked="" type="checkbox"/> YES <input type="checkbox"/> NO</p>	<p>If yes, to either question, complete the next two columns of this form.</p>	<p>Describe deficiencies in BMPs or BMP implementation</p> <p>Excessive water use for dust suppression led to discharge to drain inlet on storm drain line plugged downstream of SW-11. No discharge to municipal storm system occurred.</p>	<p>Describe additional/revised BMPs or corrective actions and their date(s) of implementation</p> <p>Adjust water spray rate to reduce/prevent runoff. Storm drains in affected area to be covered or protected by additional sediment controls during the dry season. LRTC employees will be trained to prevent over spraying. Corrective actions to be implemented during the summer of 2013.</p>
<p>ARE ADDITIONAL/REVISED BMPs NECESSARY?</p> <p><input type="checkbox"/> YES <input checked="" type="checkbox"/> NO</p>				

2012-2013  
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SIDE B

FORM 5 (Continued)-ANNUAL COMPREHENSIVE SITE COMPLIANCE EVALUATION  
POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY BMP STATUS

EVALUATION DATE: 6/10/13

INSPECTOR NAME: Greg Hulburd, P.E.

TITLE: Senior Staff Engineer

SIGNATURE: 

<b>POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY AREA</b> (as identified in your SWPPP)  North Parr Yard Storm Water Interceptor SW-12	<b>HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED?</b> <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	If yes, to either question, complete the next two columns of this form	<b>Describe deficiencies in BMPs or BMP implementation</b>	<b>Describe additional/revised BMPs or corrective actions and their date(s) of implementation</b>
	<b>ARE ADDITIONAL/REVISED BMPs NECESSARY?</b> <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO			
<b>POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY AREA</b> (as identified in your SWPPP)	<b>HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED?</b> <input type="checkbox"/> YES <input type="checkbox"/> NO	If yes, to either question, complete the next two columns of this form	<b>Describe deficiencies in BMPs or BMP implementation</b>	<b>Describe additional/revised BMPs or corrective actions and their date(s) of implementation</b>
	<b>ARE ADDITIONAL/REVISED BMPs NECESSARY?</b> <input type="checkbox"/> YES <input type="checkbox"/> NO			
<b>POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY AREA</b> (as identified in your SWPPP)	<b>HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED?</b> <input type="checkbox"/> YES <input type="checkbox"/> NO	If yes, to either question, complete the next two columns of this form	<b>Describe deficiencies in BMPs or BMP implementation</b>	<b>Describe additional/revised BMPs or corrective actions and their date(s) of implementation</b>
	<b>ARE ADDITIONAL/REVISED BMPs NECESSARY?</b> <input type="checkbox"/> YES <input type="checkbox"/> NO			
<b>POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY AREA</b> (as identified in your SWPPP)	<b>HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED?</b> <input type="checkbox"/> YES <input type="checkbox"/> NO	If yes, to either question, complete the next two columns of this form	<b>Describe deficiencies in BMPs or BMP implementation</b>	<b>Describe additional/revised BMPs or corrective actions and their date(s) of implementation</b>
	<b>ARE ADDITIONAL/REVISED BMPs NECESSARY?</b> <input type="checkbox"/> YES <input type="checkbox"/> NO			

## **ATTACHMENT B**

**2012-2013 ANNUAL REPORT FOR STORM WATER DISCHARGES  
ASSOCIATED WITH INDUSTRIAL ACTIVITIES –  
ADDITIONAL EXPLANATIONS**

**2012-2013 Annual Report**  
**Storm Water Discharges Associated with Industrial Activities**  
**Levin Richmond Terminal Corporation**  
**Additional Explanations**

**E.6.** For the first significant rain event of the year, the discharge began around 7 AM on 10/22. LRT sample personnel began sampling immediately and collected seven samples between 7 AM and 10:30 AM. During subsequent events, LRT sample personnel collected samples at the earliest opportunity during regular working hours. LRT sample personnel did not record time of discharge and the time of sampling for all sample events.

**E.7.** A total of seven storm events were sampled on ten days during the 2012-2013 reporting year. The 10/22, 11/17, 11/28, 12/15, 12/21, 2/19 and 4/4 discharges were preceded by three working days without a storm water discharge. Some of these discharges continued for multiple days. In order to evaluate BMP effectiveness, select locations were re-sampled during the multi-day events. Thus, discharges sampled on 11/21, 11/30 and 12/5 were not preceded by three working days without a storm water discharge.

**E.11.** Sampling and analysis results are reported in Form 1 for discharges which occurred during qualified rain events (10/22, 11/17, 11/28, 12/15, 12/21, 2/19, and 4/4 ) for basic parameters (pH, TSS, SC, O&G/TOC) and for other parameters appropriate to the LRT SIC code (Al, Pb, Fe, and Zn). Results for additional sampling performed on 11/21, 11/30 and 12/5 and additional parameters analyzed are presented in Tables 1 and 2.

**Form 3, Side B.** An LRT supervisor observed runoff of water used for dust suppression from a storage pile to a drain inlet in the South Parr yard (SW-11 catchment) on May 2, 2013. Upon discovery, LRT installed a drain plug in the storm drain pipe to prevent discharge. No unauthorized non-storm discharges were identified during the May 16, 2013 inspection.

**ATTACHMENT C**

**ANALYTICAL DATA**

## **TABLES**



Table 1. 2012 -2013 Annual Stormwater Sampling Storm Water Sampling Data for General Parameters, Metals, and Polycyclic Aromatic Hydrocarbons—Levin Richmond Terminal Corporation, 402 Wright Way, Richmond, California

Discharge Location	Notes	Chemical Oxygen Demand mg/L	pH -	Specific Conductance µmhos/cm	Total Oil and Grease mg/L	Total Organic Carbon mg/L	Total Suspended Solids mg/L	Aluminum µg/L	Antimony µg/L	Arsenic µg/L	Barium µg/L	Beryllium µg/L	Cadmium µg/L	Chromium µg/L	Cobalt µg/L	Copper µg/L	Iron µg/L	Lead µg/L	Mercury µg/L	Molybdenum µg/L	Nickel µg/L	Selenium µg/L	Silver µg/L	Thallium µg/L	Vanadium µg/L	Zinc µg/L	Acenaphthene µg/L	Acenaphthylene µg/L	Anthracene µg/L	Benzo(a)anthracene µg/L	Benzo(a)pyrene µg/L	Benzo(b)fluoranthene µg/L	Benzo(g,h,i)perylene µg/L	Benzo(k)fluoranthene µg/L	Chrysene µg/L	Dibenz(a,h)anthracene µg/L	Fluoranthene µg/L	Fluorene µg/L	Indeno(1,2,3-cd)pyrene µg/L	Naphthalene µg/L	Phenanthrene µg/L	Pyrene µg/L		
SW-1 10/22/2012 11/30/2012 12/21/2012	Note (a)	60 ND 79	--- 7.43 7.2	130 48 160	ND ND 38.8	17 1.1 5.9	41 120 140	1,300 ND 2,600	--- --- ---	--- --- ---	--- --- ---	--- --- ---	--- ND ---	--- ND ---	--- ND ---	37 ND 170	2,900 590 6,800	39 ND 410	--- --- ---	--- --- ---	--- --- ---	--- --- ---	--- --- ---	--- --- ---	17 ND 18	320 120 2,400	--- --- ---	--- --- ---	--- --- ---	--- --- ---	--- --- ---	--- --- ---	--- --- ---	--- --- ---	--- --- ---	--- --- ---	--- --- ---	--- --- ---	--- --- ---	--- --- ---				
SW-2 10/22/2012 11/17/2012 11/21/2012 11/30/2012 12/21/2012 4/4/2013 4/4/2013 4/4/2013	Note (b)  Note (a) Note (a)  Note (c) F - 10 micron, Note (c) F - 0.45 micron, Note (c)	420 280 130 ND 150 --- --- ---	--- --- --- 8.08 8.1 8.61 --- ---	202 190 140 220 270 147 --- ---	ND ND ND ND 15.1 --- ---	8.9 6.2 1.5 1.2 8.1 --- ---	446 210 290 180 440 140 ---	9,300 3,200 900 2,000 1,900 1,900 330 14	--- --- --- --- 2.6 2.0 1.6 J	--- --- --- --- 2.8 1.2 J ND	--- --- --- --- 46 ND 20	--- --- --- --- 0.11 J ND	--- --- --- --- 1.2 J ND	--- --- --- --- 10 4.3 2.5	--- --- --- --- 3.2 J 0.17	--- --- --- --- 4.1 J	71 24 ND 18 120 28 10 11	23,000 15,000 9,700 9,500 8,100 6,700 16 J	150 35 13 23 410 75 16 J	--- --- --- --- 5.0 11 0.93 J	--- --- --- --- ND 0.10 J	--- --- --- --- ND ND	41 31 14 23 22 15 4.7 2.1	730 220 120 250 2,700 410 91 22	--- --- --- --- --- ND ND ND	--- --- --- --- --- ND ND ND	--- --- --- --- --- 0.041 J	--- --- --- --- --- 0.27 0.23 0.20	--- --- --- --- --- 0.20 0.091 J	--- --- --- --- --- 0.055 J	--- --- --- --- --- 0.39 0.089 J	--- --- --- --- --- 0.32 ND	--- --- --- --- --- 0.075 J	--- --- --- --- --- 0.037 J	--- --- --- --- --- 0.20 0.070 J	--- --- --- --- --- 0.35 0.11								
SW-3 10/22/2012 11/30/2012 12/21/2012		110 ND 41	--- 7.65 7.3	631 550 1,940	ND ND ND	4.3 0.65 3.1	77 96 110	1,100 330 390	--- --- ---	--- --- ---	--- --- ---	--- --- ---	--- --- ---	--- --- ---	--- --- ---	8.7 ND 7.7	4,200 2,700 1,100	7.5 ND 13	--- --- ---	--- --- ---	--- --- ---	--- --- ---	--- --- ---	--- --- ---	16 14 20	95 76 140	--- --- ---	--- --- ---	--- --- ---	--- --- ---	--- --- ---	--- --- ---	--- --- ---	--- --- ---	--- --- ---	--- --- ---	--- --- ---	--- --- ---	--- --- ---					
SW-4 10/22/2012 11/17/2012 11/28/2012 11/30/2012 12/5/2012 12/15/2012 12/21/2012 2/19/2013 2/19/2013 2/19/2013	  Note (a) Note (a)  Note (c) F - 0.45 micron, Note (c) Duplicate, Note (c)	120 88 ND ND 76 70 56 --- --- ---	--- --- 8.13 8.17 --- 7.3 7.1 --- ---	1,070 510 380 200 130 1,430 1,320 --- ---	ND ND ND ND ND ND ND --- ---	7.7 5.4 2.5 0.89 1.8 6.4 5.9 --- ---	58.5 60 190 360 77 34 30 38 --- 61	250 970 600 820 120 170 350 93 ND ---	--- --- --- --- --- --- --- --- ---	--- --- --- --- --- --- --- --- ---	--- --- --- --- --- --- --- --- ---	--- --- --- --- --- --- --- --- ---	--- --- --- --- --- --- --- --- ---	--- --- --- --- --- --- --- --- ---	--- --- --- --- --- --- --- --- ---	6.6 27 60 12 4.1 7.3 6.3 5.1 4.6	830 2,700 2,100 4,200 330 510 870 480 180	6.7 48 16 21 3.7 7.2 13 4.8 1.0 ND	--- --- --- --- --- --- --- ND 1.6	--- --- --- --- --- --- --- ND ---	--- --- --- --- --- --- --- --- ---	140 73 77 71 20 630 560 56 53	78 220 97 150 51 71 100 73 36	--- --- --- --- --- --- --- ND ND	--- --- --- --- --- --- --- 0.4 1.9	--- --- --- --- --- --- --- 2.5 1.2	--- --- --- --- --- --- --- 2.0 0.2	--- --- --- --- --- --- --- 3.7 1.2	--- --- --- --- --- --- --- 0.4 0.1	--- --- --- --- --- --- --- 0.6 0.3	--- --- --- --- --- --- --- 1.1 1.4													
SW-5 10/22/2012 11/17/2012 11/21/2012 11/30/2012 12/5/2012 12/21/2012	  Note (a) Note (a) Note (a)	73 20 ND ND 19 18	--- --- --- 7.76 --- 6.5	150 110 68 72 75 110	ND ND ND ND ND ND	13 7.7 2.5 1.1 2.4 2.6	52.4 31.0 11.0 20 22 11.0	790 700 570 ND 100 150	--- --- --- --- --- ---	--- --- --- --- --- ---	--- --- --- --- --- ---	--- --- --- --- --- ---	--- --- --- --- --- ---	--- --- --- --- --- ---	38 28 ND ND 7.1 5.4	2,200 1,800 1,400 560 200 310	22 32 15 ND 3.5 5.9	--- --- --- --- --- ---	--- --- --- --- --- ---	--- --- --- --- --- ---	--- --- --- --- --- ---	12 ND --- ND 3 6	190 170 85 46 72 54	--- --- --- --- --- ---	--- --- --- --- --- ---	--- --- --- --- --- ---	--- --- --- --- --- ---	--- --- --- --- --- ---	--- --- --- --- --- ---	--- --- --- --- --- ---	--- --- --- --- --- ---	--- --- --- --- --- ---												
SW-6 11/30/2012 12/5/2012 12/21/2012	Note (a) Note (a)	ND 23 12	7.58 --- 6.6	80 93 460	ND ND ND	1.1 4.0 2.2	3.4 ND 9.0	ND 130 190	--- --- ---	--- --- ---	--- --- ---	--- --- ---	--- --- ---	--- --- ---	--- --- ---	ND 19 9.0	290 200 540	ND 7.8 4.4	--- --- ---	--- --- ---	--- --- ---	--- --- ---	--- --- ---	ND 2.9 4	42 160 58	--- --- ---	--- --- ---	--- --- ---	--- --- ---	--- --- ---	--- --- ---	--- --- ---	--- --- ---	--- --- ---	--- --- ---	--- --- ---	--- --- ---							
SW-7 11/30/2012 12/21/2012	Note (a)	ND 50	7.62 7.4	130 4,650	ND ND	2.8 3.6	ND 9.0	ND 210	--- ---	--- ---	--- ---	--- ---	--- ---	--- ---	--- ---	ND 8.5	310 520	ND 3.5	--- ---	--- ---	--- ---	--- ---	--- ---	--- ---	ND 3.5	30 46	--- ---	--- ---	--- ---	--- ---	--- ---	--- ---	--- ---	--- ---	--- ---	--- ---	--- ---	--- ---	--- ---	--- ---	--- ---			
S PARR SW-11 10/22/2012 11/21/2012 11/30/2012 12/21/2012 4/4/2013 4/4/2013 4/4/2013	 Note (a) Note (a)  Note (c) F - 10 micron, Note (c) F - 0.45 micron, Note (c)	93 ND ND 45 --- --- ---	--- --- 7.96 7.7 8.25 --- ---	591 97 170 590 179 --- ---	ND ND ND ND --- ---	4.7 1.5 ND 2.4 --- ---	111 ND 15.0 210 46 ---	1,700 ND ND 600 300 25 ND	--- --- --- --- 7.1 7.6 6.9	--- --- --- --- 1.2 0.93 ND	--- --- --- --- 14 9.8 79	--- --- --- --- ND ND ND	--- --- --- --- ND ND ND	--- --- --- --- 4.1 2.9 2.6	--- --- --- --- 0.36 J ND	--- --- --- --- 2.9 J	10 ND ND 5.2 2.9 1.9 J	2,100 ND 670 970 560 2.4 J	18 ND ND 11 2.4 J	--- --- --- --- ND 5.0 4.5	--- --- --- --- 4.6 1.1 ND	--- --- --- --- 1.2 J	--- --- --- --- ND ND	--- --- --- --- ND ND	180 40 20 77 65 66 61	68 ND 21 87 33 5.7 26	--- --- --- --- ND ND ND	--- --- --- --- ND ND ND	--- --- --- --- 1.6 1.9 1.0	--- --- --- --- 1.6 0.31	--- --- --- --- 0.31 2.3	--- --- --- --- 0.81 0.26	--- --- --- --- 0.070 J	--- --- --- --- 0.49 0.14	--- --- --- --- 0.69 0.20	--- --- --- --- 0.99 0.11								
N PARR SW-12 10/22/2012 11/21/2012 11/30/2012 12/21/2012	 Note (a) Note (a)	110 43 ND 28	--- --- 9.17 6.8	165 150 65 97	ND ND ND ND	26 7.7 0.63 2.7	110 57 390 15	2,600 4,100 15,000 1,100	--- --- --- ---	--- --- --- ---	--- --- --- ---	--- --- --- ---	--- --- --- ---	--- --- --- ---	--- --- --- ---	34 ND 39 16	5,200 4,800 23,000 1,100	27 14 44 38	--- --- --- ---	--- --- --- ---	--- --- --- ---	--- --- --- ---	16 22 46 13	210 82 200 140	--- --- --- ---	--- --- --- ---	--- --- --- ---	--- --- --- ---	--- --- --- ---	--- --- --- ---	--- --- --- ---	--- --- --- ---	--- --- --- ---	--- --- --- ---	--- --- --- ---									
Benchmarks		---	6.0-9.0 <sup>d</sup>	---	15 <sup>e</sup>	---	100 <sup>g</sup>	750 <sup>f</sup>	---	---	---	---	---	---	---	33.2 <sup>f</sup>	1,000 <sup>f</sup>	262 <sup>f</sup>	---	---	---	---	---	---	---	260 <sup>f</sup>	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

**Note:**  
Data presented is from 2012-2013 storm water sampling events. For 2012-2013 data, laboratory reports were obtained from Levin Richmond Terminal Corporation and Helen Mawhinney of Environmental Technical Services, Inc. Bold values exceed benchmarks listed at the bottom of the table.  
Metal concentrations are reported on a total recoverable basis, except where indicated with an "F" (filtered).  
<sup>a</sup> Sampling events on 11/21/2012, 11/30/2012, and 12/5/2012 were not preceded by three days without discharge. The results from these sampling events are provided for reference only.  
<sup>b</sup> During the October 22, 2012 sampling event at location SW-2, modifications to the storm water interceptor were being implemented to improve its functionality. LRTC reports that elevated concentrations observed in the SW-2 sample on this date are likely attributable to this activity.  
<sup>c</sup> Sampling on February 19, 2013 and April 4, 2013 was performed to characterize storm water for BMP effectiveness evaluation and treatment design purposes. Samples collected in these events are representative of discharge on these dates.  
<sup>d</sup> Instantaneous maximum; benchmark based on San Francisco Bay Basins (Region 2) Water Quality Control Plan. California Regional Water Quality Control Board – San Francisco Bay Region, 2011.  
<sup>e</sup> Annual average; NAL based on Multi-sector General Permit for Stormwater Discharges Associated with Industrial Activities (MSGP), Modified May 27, 2009.  
<sup>f</sup> Annual average; NAL based on MSGP, Section 8, Subpart Q. Water Transportation. Water Hardness Range = 250+ mg/L.

**Acronyms/Abbreviations**  
BMP = best management practice  
F = filtered  
J = estimated value  
LRTC = Levin Richmond Terminal Corporation  
mg/L = milligrams per liter  
ND = not detected  
µg/L = micrograms per liter  
µmhos/cm = micromhos per centimeter  
^ = laboratory qualifier applied to lead results due to unspecified calibration exceedances  
--- = not analyzed or not applicable

Table 2. 2012 -2013 Storm Water Sampling Data for Pesticides, Petroleum Hydrocarbons, and Volatile Organic Compounds—Levin Richmond Terminal Corporation, 402 Wright Way, Richmond, California

	Notes	4,4'-DDD µg/L	4,4'-DDE µg/L	4,4'-DDT µg/L	Aldrin µg/L	alpha-BHC µg/L	alpha-Chlordane µg/L	beta-BHC µg/L	Chlordane µg/L	delta-BHC µg/L	Dieldrin µg/L	Endosulfan I µg/L	Endosulfan II µg/L	Endosulfan sulfate µg/L	Endrin µg/L	Endrin aldehyde µg/L	Endrin ketone µg/L	gamma-BHC (Lindane) µg/L	gamma-Chlordane µg/L	Heptachlor µg/L	Heptachlor epoxide µg/L	Hexachlorobenzene µg/L	Hexachlorocyclopentadiene µg/L	Methoxychlor µg/L	Toxaphene µg/L	TPH-Diesel µg/L	TPH-Gasoline µg/L	TPH-Motor Oil µg/L	Benzene µg/L	Ethyl Benzene µg/L	MTBE µg/L	Toluene µg/L	m,p-Xylene µg/L	o-Xylene µg/L	Xylenes, Total µg/L			
SW-1 10/22/2012 11/30/2012 12/21/2012	Note (a)	0.013 ND ND	0.011 ND ND	0.077 ND ND	ND ND ND	ND ND ND	ND ND ND	ND ND ND	ND ND ---	ND ND ND	ND ND ND	ND ND ND	ND ND ND	ND ND ND	ND ND ND	ND ND ND	ND ND ---	ND ND ND	ND ND ND	ND ND ND	ND ND ND	ND ND ND	ND ND ND	ND ND ND	---	ND ND ND	870 440 3,300	ND ND ND	ND ND ND	ND ND ---	ND ND ND	---	---	ND ND ND	---	ND ND ND		
SW-2 10/22/2012 11/17/2012 11/21/2012 11/30/2012 12/21/2012	Note (a) Note (a)	0.016 ND ND ND ND	ND ND ND 0.038 J ND	0.041 ND ND ND ND	ND ND ND 0.033 J ND	ND ND ND 0.040 J ND	ND ND ND ND ND	ND ND ND ND ---	ND ND ND ND ---	ND ND ND ND ND	ND ND ND ND ND	ND ND ND ND ND	ND ND ND ND ND	ND ND ND ND ND	ND ND ND 0.028 J ND	ND ND ND ND ND	ND ND ND ND ND	ND ND ND ND ND	ND ND ND ND ND	ND ND ND ND ND	ND ND ND ND ND	ND ND ND ND ND	ND ND ND ND ND	---	ND ND ND ND ND	1,300 2,100 380 1,600 5,500	ND ND ND ND ND	ND ND ND ND ND	ND ND ND ND ---	ND ND ND ND ND	---	---	ND ND ND	---	---	ND ND ND		
SW-3 10/22/2012 11/30/2012 12/21/2012	Note (b) Note (a)	ND ND ND	ND ND ND	0.028 ND ND	ND ND ND	ND ND ND	ND ND ND	ND ND ND	ND ND ---	ND ND ND	ND ND ND	ND ND ND	ND ND ND	ND ND ND	ND ND ND	ND ND ND	ND ND ND	ND ND ND	ND ND ND	ND ND ND	ND ND ND	ND ND ND	ND ND ND	ND ND ND	---	ND ND ND	360 1,100 2,400	ND ND ND	ND ND ND	ND ND ---	ND ND ND	---	---	ND ND ND	---	---	ND ND ND	
SW-4 10/22/2012 11/17/2012 11/28/2012 11/30/2012 12/5/2012 12/15/2012 12/21/2012 2/19/2013 2/19/2013	Note (a) Note (a) Note (c) Duplicate	ND ND ND ND ND ND ND ---	ND ND ND ND ND ND ND ---	0.023 ND ND ND ND ND ND ---	ND ND 0.081 J ND ND ND ND ---	ND ND ND ND ND ND ND ---	ND ND ND ND ND ND ND ---	ND ND ND ND ND ND ND ---	ND ND ND ND ND ND ND ---	ND ND ND ND ND ND ND ---	ND ND ND ND ND ND ND ---	ND ND ND ND ND ND ND ---	ND ND ND ND ND ND ND ---	ND ND ND ND ND ND ND ---	ND ND ND ND ND ND ND ---	ND ND ND ND ND ND ND ---	ND ND ND ND ND ND ND ---	ND ND ND ND ND ND ND ---	ND ND ND ND ND ND ND ---	ND ND ND ND ND ND ND ---	ND ND ND ND ND ND ND ---	ND ND ND ND ND ND ND ---	ND ND ND ND ND ND ND ---	---	ND ND ND ND ND ND ND ND	360 2,100 2,900 1,800 ND 1,100 1,100 ---	ND ND ND ND ND ND ND ND	ND ND ND ND ND ND ND ND	ND ND ND ND ND ND ND ND	---	---	ND ND ND	---	---	ND ND ND	---	---	ND ND ND
SW-5 10/22/2012 11/17/2012 11/21/2012 11/30/2012 12/5/2012 12/21/2012	Note (a) Note (a) Note (a)	ND ND ND ND ND ND	0.013 ND ND ND ND ND	0.043 ND ND ND ND ND	ND ND ND ND ND ND	ND ND ND ND ND ND	ND ND ND ND ND ND	ND ND ND ND ND ---	ND ND ND ND ND 0.07	ND ND ND ND ND ND	0.019 ND ND ND ND ND ND	ND ND ND ND ND ND	ND ND ND ND ND ND	ND ND ND ND ND ND	ND ND ND ND ND ND	ND ND ND ND ND ND	ND ND ND ND ND ND	ND ND ND ND ND ND	ND ND ND ND ND ND	ND ND ND ND ND ND	ND ND ND ND ND ND	ND ND ND ND ND ND	---	ND 230 670 520 J ND 310 J	800 1,500 ND 520 J ND 550	ND ND ND ND ND ND	ND ND ND ND ND ND	ND ND ND ND ND ND	---	---	ND ND ND	---	---	ND ND ND				
SW-6 11/30/2012 12/5/2012 12/21/2012	Note (a) Note (a)	ND ND ND	ND ND ND	0.024 ND ND	ND ND ND	ND ND ND	ND ND ND	ND ND ND	ND ---	ND ND ND	ND ND ND	ND ND ND	ND ND ND	ND ND ND	ND ND ND	ND ND ND	ND ---	ND ND ND	ND ND ND	ND ND ND	ND ND ND	ND ND ND	ND ND ND	ND ND ND	---	ND 860 J 160 J	ND ND ND	ND ND ND	ND ND ND	ND ND ---	ND ND ND	ND ND ND	ND ND ND	ND ND ND	ND ND ND			
SW-7 11/30/2012 12/21/2012	Note (a)	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ---	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ---	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	---	ND 210 J	ND ND	ND ND	ND ND	ND ---	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	
S PARR SW-11 10/22/2012 11/21/2012 11/30/2012 12/21/2012	Note (a) Note (a)	0.017 ND ND ND	ND ND ND ND	0.18 ND ND 0.7	ND ND ND ND	ND ND ND ND	ND ND ND ND	ND ND ND ---	ND ND ND ND	ND ND ND ND	ND ND ND ND	ND ND ND ND	ND ND ND ND	ND ND ND ND	ND ND ND ND	ND ND ND ND	ND ND ND ND	ND ND ND ND	ND ND ND ND	ND ND ND ND	ND ND ND ND	ND ND ND ND	ND ND ND ND	---	ND ND ND ND	300 190 ND 1,500	ND ND ND ND	ND ND ND ND	ND ND ND ---	ND ND ND ND	ND ND ND ND	ND ND ND ND	ND ND ND ND	ND ND ND ND				
N PARR SW-12 10/22/2012 11/21/2012 11/30/2012 12/21/2012	Note (a) Note (a)	ND ND ND ND	ND ND ND ND	ND ND ND ND	ND ND ND ND	ND ND ND ND	ND ND ND ND	ND ND ND ---	ND ND ND ND	ND ND ND ND	ND ND ND ND	ND ND ND ND	ND ND ND ND	ND ND ND ND	ND ND ND ND	ND ND ND ND	ND ND ND ND	ND ND ND ND	ND ND ND ND	ND ND ND ND	ND ND ND ND	ND ND ND ND	ND ND ND ND	---	ND ND ND ND	420 860 ND ND	ND ND ND ND	ND ND ND ---	ND ND ND ND	ND ND ND ND	ND ND ND ND	ND ND ND ND	ND ND ND ND	ND ND ND ND				

Notes:  
Data presented is from 2012-2013 storm water sampling eventsFor 2012-2013 data, laboratory reports were obtained from Levin Richmond Terminal Corporation and Helen Mawhinney of Environmental Technical Services, Inc.  
<sup>a</sup> Sampling events on 11/21/2012, 11/30/2012, and 12/5/2012 were not preceded by three days without discharge. The results from these sampling events are provided for reference only.  
<sup>b</sup> During the October 22, 2012 sampling event at location SW-2, modifications to the storm water interceptor were being implemented to improve its functionality. LRTC reports that elevated concentrations observed in the SW-2 sample on this date are likely attributable to this activity.  
<sup>c</sup> The 2/19/2013 sample also sampled for tert-butyl alcohol (TBA), isopropyl ether (DIPE), ethyl tert-butyl ether (ETBE), methyl tert-amyl ether (TAME), 1,2-dichloroethane, and 1,2-dibromoethane; none of these compounds were detected above their reporting limits.

Acronyms/Abbreviations:  
J = estimated value  
ND = not detected  
TPH = total petroleum hydrocarbons  
--- = not analyzed  
µg/L = micrograms per liter

**2012 – 2013**  
**LABORATORY ANALYTICAL REPORTS**



## Analytical Report

Environmental Technical Services  1548 Jacob Avenue  San Jose, CA 95118	Client Project ID: LRT SW Annual	Date Sampled: 10/22/12
		Date Received: 10/23/12
	Client Contact: Helen Mawhinney	Date Reported: 10/31/12
	Client P.O.: #TL23180	Date Completed: 10/31/12

**WorkOrder: 1210769**

October 31, 2012

Dear Helen:

Enclosed within are:

- 1) The results of the **7** analyzed samples from your project: **LRT SW Annual**,
- 2) QC data for the above samples, and
- 3) A copy of the chain of custody.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits.

If you have any questions or concerns, please feel free to give me a call. Thank you for choosing

McC Campbell Analytical Laboratories for your analytical needs.

Best regards,

Angela Rydelius  
Laboratory Manager  
McC Campbell Analytical, Inc.

*The analytical results relate only to the items tested.*

## LRT ANNUAL STORMWATER CHAIN OF CUSTODY SAMPLE

1210769

CHAIN OF CUSTODY/ANALYSES REQUESTED				ANNUAL STORMWATER SAMPLES									
Environmental Technical Services				PO. NO. (required) TL23180						<b>ANALYZE USING EPA METHODS 40 CFR 136</b>			
1548 Jacob Avenue				Project Name: LRT SW ANNUAL									
San Jose, California 95118				1st event									

CLIENT ID	CHK BY SYSTEMS TO BE ANALYZED	DATE	TIME	LAB ID NO	TSS	SPEC COND	TPHG BTEX MTbE 8260	TOG 1664	COD	TTL METALS AL, CU, FE, PB, ZN, VN	8081	TOC	TEPH MO
SW-1	X	10/22/2012	0700AM		X	X	X	X	X	X	X	X	X
SW-2	X	10/22/2012	0800AM		X	X	X	X	X	X	X	X	X
SW-3	X	10/22/2012	0920AM		X	X	X	X	X	X	X	X	X
SW-4	X	10/22/2012	0900AM		X	X	X	X	X	X	X	X	X
SW-5	X	10/22/2012	0930AM		X	X	X	X	X	X	X	X	X
SW-6	NS												
SW-7	NS												
S PARR SW-10	NS												
S PARR SW-11	X	10/22/2012	1000AM		X	X	X	X	X	X	X	X	X
N PARR SW-12	X	10/22/2012	1030AM		X	X	X	X	X	X	X	X	X

SW # 1,2,3,4,5, 11,12. Sampled/Released By:

Print: LRT SAMPLER TONY LESTER Sign: *T. Lester*

Date: 10/22/12

Time: 1640 hrs

Sampled/Released To: *Grady Payne*Print: LRT FRIDGE Sign: *Grady Payne*

Date: 10/22/12

Time: 1640 hrs

Sampled/Released By:

Print: LRT FRIDGE Sign: *Grady Payne*Date: 9/22/12 *TL*Time: 12:05 *TL*

Sampled/Released To:

Print: Lab Courier Sign: *Lab Courier*Date: 9/22/12 *TL*Time: 12:05 *TL*

Sampled/Released By:

Print: *Lab Courier* Sign: *Lab Courier*

Date: 10/23/12

Time: 1645

Sampled/Released To: received by

Print: ZORAN DOR CORREZ

Sign: *Zoran Dor*

Date: 10/23/12

Time: 1645

IF APPROPRIATE, CONTAINERS PRESERVED IN LAB

APPROPRIATE CONTAINERS PRESERVED IN LAB

VOAS O&G METALS OTHER

LRT ANNUAL STORMWATER CHAIN OF CUSTODY SAMPLE

Notes: Please analyze all Systems checked for all analyses listed. NS=Not sampled because systems were not discharging. Must obtain PO. SW-3, SW-6; SW-7; & SW-10 WERE NOT DICHARGING. N PARR SW-12 BARELY TRICKLING (wanted to analyze to see how it's doing)





## CHAIN-OF-CUSTODY RECORD

WorkOrder: 1210769

ClientCode: ETS

☐ WaterTrax☐ WriteOn☐ EDF☐ Excel☐ EQuIS☒ Email☐ HardCopy☐ ThirdParty☐ J-flag

## Report to:

Helen Mawhinney  
Environmental Technical Services  
1548 Jacob Avenue  
San Jose, CA 95118  
510-385-4308 FAX: 510-522-6259

Email: HMawhinneyETS@aol.com; james.jimenez

cc:

PO: #TL23180

ProjectNo: LRT SW Annual

## Bill to:

Helen Mawhinney  
Environmental Technical Services  
1548 Jacob Avenue  
San Jose, CA 95118

## Requested TAT:

5 days

*Date Received:* 10/23/2012*Date Printed:* 10/23/2012

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					1	2	3	4	5	6	7	8	9	10	11	12
1210769-001	SW-1	Water	10/22/2012 7:00	<input type="checkbox"/>	G	I	E	C	B	E	D	A	H	F		
1210769-002	SW-2	Water	10/22/2012 8:00	<input type="checkbox"/>	G	I	E	C	B	E	D	A	H	F		
1210769-003	SW-3	Water	10/22/2012 9:20	<input type="checkbox"/>	G	I	E	C	B	E	D	A	H	F		
1210769-004	SW-4	Water	10/22/2012 9:00	<input type="checkbox"/>	G	I	E	C	B	E	D	A	H	F		
1210769-005	SW-5	Water	10/22/2012 9:30	<input type="checkbox"/>	G	I	E	C	B	E	D	A	H	F		
1210769-006	S PARR SW-11	Water	10/22/2012 10:00	<input type="checkbox"/>	G	I	E	C	B	E	D	A	H	F		
1210769-007	S PARR SW-12	Water	10/22/2012 10:30	<input type="checkbox"/>	G	I	E	C	B	E	D	A	H	F		

## Test Legend:

1	1664A_W	2	8081_W	3	ALKIMET_W	4	COD_W	5	GAS8260_W
6	METALSMS_W	7	SC_W	8	TOC_W	9	TPH_W	10	TSS_W
11		12							

The following SampleIDs: 001B, 002B, 003B, 004B, 005B, 006B, 007B contain testgroup.

Prepared by: Zoraida Cortez

## Comments:

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days).  
Hazardous samples will be returned to client or disposed of at client expense.



## Sample Receipt Checklist

Client Name: **Environmental Technical Services**

Date and Time Received: **10/23/2012 6:17:10 PM**

Project Name: **LRT SW Annual**

Login Reviewed by: **Zoraida Cortez**

WorkOrder N°: **1210769** Matrix: Water

Carrier: Rob Pringle (MAI Courier)

### Chain of Custody (COC) Information

Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Sample IDs noted by Client on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Date and Time of collection noted by Client on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Sampler's name noted on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>

### Sample Receipt Information

Custody seals intact on shipping container/cooler?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>
Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper containers/bottles?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	

### Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Container/Temp Blank temperature	Cooler Temp: 1.8°C		NA <input type="checkbox"/>
Water - VOA vials have zero headspace / no bubbles?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	No VOA vials submitted <input type="checkbox"/>
Sample labels checked for correct preservation?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Metal - pH acceptable upon receipt (pH<2)?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	NA <input type="checkbox"/>
Samples Received on Ice?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	

(Ice Type: WET ICE )

\* NOTE: If the "No" box is checked, see comments below.

Comments: Sample 001 had headspace.



**McC Campbell Analytical, Inc.**

*"When Quality Counts"*

1534 Willow Pass Road, Pittsburg, CA 94565-1701  
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269  
http://www.mccampbell.com / E-mail: main@mccampbell.com

Environmental Technical Services  1548 Jacob Avenue  San Jose, CA 95118	Client Project ID: LRT SW Annual	Date Sampled: 10/22/12
		Date Received: 10/23/12
	Client Contact: Helen Mawhinney	Date Extracted 10/29/12-10/30/12
	Client P.O.: #TL23180	Date Analyzed 10/30/12-10/31/12

**Hexane Extractable Material (HEM; Oil & Grease) without Silica Gel Clean Up\***

Extraction method: E1664A

Analytical methods: E1664A

Work Order: 1210769

Lab ID	Client ID	Matrix	HEM	DF	% SS	Comments
1210769-001G	SW-1	W	ND	1	N/A	
1210769-002G	SW-2	W	ND	1	N/A	
1210769-003G	SW-3	W	ND	1	N/A	
1210769-004G	SW-4	W	ND	1	N/A	
1210769-005G	SW-5	W	ND	1	N/A	
1210769-006G	S PARR SW-11	W	ND	1	N/A	
1210769-007G	S PARR SW-12	W	ND	1	N/A	

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	5.0	mg/L
	S	NA	NA

\* water samples are reported in mg/L; reporting limit may change due to variable water sample volume

DF = dilution factor (may be raised to dilute target analyte or matrix interference).

%SS = Percent Recovery of Surrogate Standard

# surrogate diluted out of range

DHS ELAP Certification 1644

 Angela Rydelius, Lab Manager

**McC Campbell Analytical, Inc.***"When Quality Counts"*1534 Willow Pass Road, Pittsburg, CA 94565-1701  
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269  
http://www.mcccampbell.com / E-mail: main@mcccampbell.com

Environmental Technical Services  1548 Jacob Avenue  San Jose, CA 95118	Client Project ID: LRT SW Annual	Date Sampled: 10/22/12
		Date Received: 10/23/12
	Client Contact: Helen Mawhinney	Date Extracted: 10/23/12
	Client P.O.: #TL23180	Date Analyzed: 10/24/12

**Organochlorine Pesticides by GC-ECD (8080 Basic Target List)\***

Extraction Method: SW3510C

Analytical Method: SW8081A

Work Order: 1210769

Lab ID	1210769-001I	1210769-002I	1210769-003I	1210769-004I	Reporting Limit for DF =1	
Client ID	SW-1	SW-2	SW-3	SW-4		
Matrix	W	W	W	W	S	W
DF	1	1	1	1		

Compound	Concentration				µg/kg	µg/L
Aldrin	ND	ND	ND	ND	NA	0.005
a-BHC	ND	ND	ND	ND	NA	0.01
b-BHC	ND	ND	ND	ND	NA	0.005
d-BHC	ND	ND	ND	ND	NA	0.005
g-BHC	ND	ND	ND	ND	NA	0.02
Chlordane (Technical)	ND	ND	ND	ND	NA	0.1
a-Chlordane	ND	ND	ND	ND	NA	0.05
g-Chlordane	ND	ND	ND	ND	NA	0.05
p,p-DDD	0.013	0.016	ND	ND	NA	0.01
p,p-DDE	0.011	ND	ND	ND	NA	0.01
p,p-DDT	0.077	0.041	0.028	0.023	NA	0.01
Dieldrin	ND	ND	ND	ND	NA	0.01
Endosulfan I	ND	ND	ND	ND	NA	0.02
Endosulfan II	ND	ND	ND	ND	NA	0.02
Endosulfan sulfate	ND	ND	ND	ND	NA	0.05
Endrin	ND	ND	ND	ND	NA	0.01
Endrin aldehyde	ND	ND	ND	ND	NA	0.05
Endrin ketone	ND	ND	ND	ND	NA	0.05
Heptachlor	ND	ND	ND	ND	NA	0.01
Heptachlor epoxide	ND	ND	ND	ND	NA	0.01
Hexachlorobenzene	ND	ND	ND	ND	NA	0.5
Hexachlorocyclopentadiene	ND	ND	ND	ND	NA	1.0
Methoxychlor	ND	ND	ND	ND	NA	0.1
Toxaphene	ND	ND	ND	ND	NA	0.5

**Surrogate Recoveries (%)**

%SS:	97	98	96	97	
Comments					

\* water samples in µg/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, filter samples in µg/filter, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L.

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor.

# surrogate diluted out of range or surrogate coelutes with another peak.

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Environmental Technical Services  1548 Jacob Avenue  San Jose, CA 95118	Client Project ID: LRT SW Annual	Date Sampled: 10/22/12
		Date Received: 10/23/12
	Client Contact: Helen Mawhinney	Date Extracted: 10/23/12
	Client P.O.: #TL23180	Date Analyzed: 10/24/12

**Organochlorine Pesticides by GC-ECD (8080 Basic Target List)\***

Extraction Method: SW3510C

Analytical Method: SW8081A

Work Order: 1210769

Lab ID	1210769-005I	1210769-006I	1210769-007I	Reporting Limit for DF =1	
Client ID	SW-5	S PARR SW-11	S PARR SW-12		
Matrix	W	W	W	S	W
DF	1	1	1		

Compound	Concentration			µg/kg	µg/L
Aldrin	ND	ND	ND	NA	0.005
a-BHC	ND	ND	ND	NA	0.01
b-BHC	ND	ND	ND	NA	0.005
d-BHC	ND	ND	ND	NA	0.005
g-BHC	ND	ND	ND	NA	0.02
Chlordane (Technical)	ND	ND	ND	NA	0.1
a-Chlordane	ND	ND	ND	NA	0.05
g-Chlordane	ND	ND	ND	NA	0.05
p,p-DDD	ND	0.017	ND	NA	0.01
p,p-DDE	0.013	ND	ND	NA	0.01
p,p-DDT	0.043	0.18	ND	NA	0.01
Dieldrin	0.019	ND	ND	NA	0.01
Endosulfan I	ND	ND	ND	NA	0.02
Endosulfan II	ND	ND	ND	NA	0.02
Endosulfan sulfate	ND	ND	ND	NA	0.05
Endrin	ND	ND	ND	NA	0.01
Endrin aldehyde	ND	ND	ND	NA	0.05
Endrin ketone	ND	ND	ND	NA	0.05
Heptachlor	ND	ND	ND	NA	0.01
Heptachlor epoxide	ND	ND	ND	NA	0.01
Hexachlorobenzene	ND	ND	ND	NA	0.5
Hexachlorocyclopentadiene	ND	ND	ND	NA	1.0
Methoxychlor	ND	ND	ND	NA	0.1
Toxaphene	ND	ND	ND	NA	0.5

**Surrogate Recoveries (%)**

%SS:	96	95	99		
Comments					

\* water samples in µg/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, filter samples in µg/filter, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L.

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor.

# surrogate diluted out of range or surrogate coelutes with another peak.





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		Date Received: 10/23/12
	Client Contact: Helen Mawhinney	Date Extracted: 10/23/12
	Client P.O.: #TL23180	Date Analyzed: 10/25/12

**Alkali Metals by ICP\***

Extraction method: E200.7

Analytical methods: E200.7

Work Order: 1210769

Lab ID	Client ID	Matrix	Extraction Type	Aluminum	Iron	DF	% SS	Comments
001E	SW-1	W	TOTAL	1300	2900	1	109	
002E	SW-2	W	TOTAL	9300	23,000	1	104	
003E	SW-3	W	TOTAL	1100	4200	1	104	
004E	SW-4	W	TOTAL	250	830	1	102	
005E	SW-5	W	TOTAL	790	2200	1	105	
006E	S PARR SW-11	W	TOTAL	1700	2100	1	107	
007E	S PARR SW-12	W	TOTAL	2600	5200	1	109	

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	TOTAL	50	20	µg/L
	S	TOTAL	NA	NA	NA

\*water samples are reported in µg/L, product/oil/non-aqueous liquid samples and all TCLP / STLC / DISTLC / SPLP extracts are reported in mg/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, filter samples in µg/filter.

# means surrogate recovery outside of acceptance range due to matrix interference; & means low or no surrogate due to matrix interference; ND means not detected above the reporting limit/method detection limit; N/A means not applicable to this sample or instrument; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

TOTAL = Hot acid digestion of a representative sample aliquot.

TRM = Total recoverable metals is the "direct analysis" of a sample aliquot taken from its acid-preserved container.

DISS = Dissolved metals by direct analysis of 0.45 µm filtered and acidified sample.

DHS ELAP Certification 1644

 Angela Rydelius, Lab Manager



Environmental Technical Services  1548 Jacob Avenue  San Jose, CA 95118	Client Project ID: LRT SW Annual	Date Sampled: 10/22/12
		Date Received: 10/23/12
	Client Contact: Helen Mawhinney	Date Extracted: 10/26/12
	Client P.O.: #TL23180	Date Analyzed: 10/26/12

**Chemical Oxygen Demand (COD)\***

Analytical Method: SM5220D

Work Order: 1210769

Lab ID	Client ID	Matrix	COD	DF	Comments
1210769-001C	SW-1	W	60	1	
1210769-002C	SW-2	W	420	1	
1210769-003C	SW-3	W	110	1	
1210769-004C	SW-4	W	120	1	
1210769-005C	SW-5	W	73	1	
1210769-006C	S PARR SW-11	W	93	1	
1210769-007C	S PARR SW-12	W	110	1	

Reporting Limit for DF = 1; ND means not detected at or above the reporting limit	W	10 mg/L	
	S	NA	

\*water/product/oil/non-aqueous liquid samples and all TCLP / STLC / DISTLC / SPLP extracts are reported in mg/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, filter samples in µg/filter.



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Environmental Technical Services  1548 Jacob Avenue  San Jose, CA 95118	Client Project ID: LRT SW Annual	Date Sampled: 10/22/12
		Date Received: 10/23/12
	Client Contact: Helen Mawhinney	Date Extracted 10/24/12-10/25/12
	Client P.O.: #TL23180	Date Analyzed 10/24/12-10/25/12

**TPH(g) by Purge & Trap and GC/MS\***

Extraction method: SW5030B

Analytical methods: SW8260B

Work Order: 1210769


Lab ID	Client ID	Matrix	TPH(g)	DF	% SS	Comments
001B	SW-1	W	ND	1	93	
002B	SW-2	W	ND	1	88	
003B	SW-3	W	ND	1	113	
004B	SW-4	W	ND	1	96	
005B	SW-5	W	ND	1	96	
006B	S PARR SW-11	W	ND	1	94	
007B	S PARR SW-12	W	ND	1	93	


Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	50	µg/L
	S	NA	NA

\* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L, wipe samples in µg/wipe.

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

# surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.

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Environmental Technical Services  1548 Jacob Avenue  San Jose, CA 95118	Client Project ID: LRT SW Annual		Date Sampled: 10/22/12			
			Date Received: 10/23/12			
	Client Contact: Helen Mawhinney		Date Extracted: 10/24/12-10/25/12			
	Client P.O.: #TL23180		Date Analyzed: 10/24/12-10/25/12			
<b>MTBE and BTEX by GC/MS*</b> Extraction Method: SW5030B      Analytical Method: SW8260B      Work Order: 1210769						
Lab ID	1210769-001B	1210769-002B	1210769-003B	1210769-004B	Reporting Limit for DF = 1	
Client ID	SW-1	SW-2	SW-3	SW-4		
Matrix	W	W	W	W		
DF	1	1	1	1	S	W
<b>Compound</b>	<b>Concentration</b>				ug/kg	µg/L
Benzene	ND	ND	ND	ND	NA	0.5
Ethylbenzene	ND	ND	ND	ND	NA	0.5
Methyl-t-butyl ether (MTBE)	ND	ND	ND	ND	NA	0.5
Toluene	ND	ND	ND	ND	NA	0.5
Xylenes, Total	ND	ND	ND	ND	NA	0.5
<b>Surrogate Recoveries (%)</b>						
%SS1:	100	104	89	109		
%SS2:	100	93	119	101		
<b>Comments</b>						
<p>* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP &amp; SPLP extracts are reported in mg/L, wipe samples in µg/wipe.</p> <p>ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis.</p> <p># surrogate diluted out of range or coelutes with another peak; &amp;) low surrogate due to matrix interference.</p> <p>%SS = Percent Recovery of Surrogate Standard          DF = Dilution Factor</p>						

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Environmental Technical Services  1548 Jacob Avenue  San Jose, CA 95118	Client Project ID: LRT SW Annual		Date Sampled: 10/22/12		
			Date Received: 10/23/12		
	Client Contact: Helen Mawhinney		Date Extracted: 10/24/12-10/25/12		
	Client P.O.: #TL23180		Date Analyzed: 10/24/12-10/25/12		
<b>MTBE and BTEX by GC/MS*</b> Extraction Method: SW5030B      Analytical Method: SW8260B      Work Order: 1210769					
Lab ID	1210769-005B	1210769-006B	1210769-007B	Reporting Limit for DF = 1	
Client ID	SW-5	S PARR SW-11	S PARR SW-12		
Matrix	W	W	W		
DF	1	1	1		
<b>Compound</b>	<b>Concentration</b>			ug/kg	µg/L
Benzene	ND	ND	ND	NA	0.5
Ethylbenzene	ND	ND	ND	NA	0.5
Methyl-t-butyl ether (MTBE)	ND	ND	ND	NA	0.5
Toluene	ND	ND	ND	NA	0.5
Xylenes, Total	ND	ND	ND	NA	0.5
<b>Surrogate Recoveries (%)</b>					
%SS1:	101	102	107		
%SS2:	101	99	98		
<b>Comments</b>					
<p>* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP &amp; SPLP extracts are reported in mg/L, wipe samples in µg/wipe.</p> <p>ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis.</p> <p># surrogate diluted out of range or coelutes with another peak; &amp;) low surrogate due to matrix interference.</p> <p>%SS = Percent Recovery of Surrogate Standard          DF = Dilution Factor</p>					





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Environmental Technical Services  1548 Jacob Avenue  San Jose, CA 95118	Client Project ID: LRT SW Annual	Date Sampled: 10/22/12
		Date Received: 10/23/12
	Client Contact: Helen Mawhinney	Date Extracted: 10/24/12
	Client P.O.: #TL23180	Date Analyzed: 10/24/12

**Specific Conductivity\***

Analytical Method: SM2510B

Work Order: 1210769

Lab ID	Client ID	Matrix	Specific Conductivity	DF	Comments
1210769-001D	SW-1	W	130 @ 25.0°C	1	
1210769-002D	SW-2	W	202 @ 25.0°C	1	
1210769-003D	SW-3	W	631 @ 25.0°C	1	
1210769-004D	SW-4	W	1070 @ 25.0°C	1	
1210769-005D	SW-5	W	150 @ 25.0°C	1	
1210769-006D	S PARR SW-11	W	591 @ 25.0°C	1	
1210769-007D	S PARR SW-12	W	165 @ 25.0°C	1	

Reporting Limit for DF = 1; ND means not detected at or above the reporting limit	W	10 µmhos/cm @ 25°C	
	S	NA	

DF = Dilution Factor



Environmental Technical Services  1548 Jacob Avenue  San Jose, CA 95118	Client Project ID: LRT SW Annual	Date Sampled: 10/22/12
		Date Received: 10/23/12
	Client Contact: Helen Mawhinney	Date Extracted: 10/24/12
	Client P.O.: #TL23180	Date Analyzed: 10/24/12

**Total Organic Carbon (TOC) reported as NPOC\***

Analytical Method: E415.3

Work Order: 1210769

Lab ID	Client ID	Matrix	TOC	DF	Comments
1210769-001A	SW-1	W	17	1	
1210769-002A	SW-2	W	8.9	1	
1210769-003A	SW-3	W	4.3	1	
1210769-004A	SW-4	W	7.7	1	
1210769-005A	SW-5	W	13	1	
1210769-006A	S PARR SW-11	W	4.7	1	
1210769-007A	S PARR SW-12	W	26	1	

Reporting Limit for DF = 1; ND means not detected at or above the reporting limit	W	0.3 mg/L	
	S	NA	

\* water samples are reported in mg/L. Settleable solids and floatable matter are excluded from analysis per E415.3. TOC is reported as NPOC.

TOC = Total Organic Carbon; NPOC = Non-Purgeable Organic Carbon; DOC = Dissolved Organic Carbon;  
POC = Purgeable Organic Carbon; IC = Inorganic Carbon; TC = Total Carbon.

DF = Dilution Factor



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	Client P.O.: #TL23180	Date Analyzed 10/24/12-10/25/12

**Total Extractable Petroleum Hydrocarbons\***

Extraction method: SW3510C

Analytical methods: SW8015B

Work Order: 1210769

Lab ID	Client ID	Matrix	TPH-Motor Oil (C18-C36)	DF	% SS	Comments
1210769-001H	SW-1	W	870	1	81	e7,e2
1210769-002H	SW-2	W	1300	1	83	e7,e2
1210769-003H	SW-3	W	360	1	84	e7,e2
1210769-004H	SW-4	W	360	1	82	e7,e2
1210769-005H	SW-5	W	800	1	86	e7,e2
1210769-006H	S PARR SW-11	W	300	1	94	e7,e2
1210769-007H	S PARR SW-12	W	420	1	83	e7,e2

Reporting Limit for DF=1; ND means not detected at or above the reporting limit	W	250	µg/L
	S	NA	NA

\* water samples are reported in µg/L, wipe samples in µg/wipe, soil/solid/sludge samples in mg/kg, product/oil/non-aqueous liquid samples in mg/L, and all DISTLC / STLC / SPLP / TCLP extracts are reported in µg/L.

# cluttered chromatogram resulting in coeluted surrogate and sample peaks, or; surrogate peak is on elevated baseline, or; surrogate has been diminished by dilution of original extract.

%SS = Percent Recovery of Surrogate Standard. DF = Dilution Factor

The following descriptions of the TPH chromatogram are cursory in nature and McC Campbell Analytical is not responsible for their interpretation:

e2) diesel range compounds are significant; no recognizable pattern

e7) oil range compounds are significant

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 Angela Rydelius, Lab Manager



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	Client P.O.: #TL23180	Date Analyzed: 10/26/12

**Total Suspended Solids\***

Analytical Method: SM2540D

Work Order: 1210769

Lab ID	Client ID	Matrix	Total Suspended Solids	DF	Comments
1210769-001F	SW-1	W	41.0	5	
1210769-002F	SW-2	W	446	20	
1210769-003F	SW-3	W	77.0	10	
1210769-004F	SW-4	W	58.5	5	
1210769-005F	SW-5	W	52.4	2	
1210769-006F	S PARR SW-11	W	111	5	
1210769-007F	S PARR SW-12	W	110	5	

Reporting Limit for DF = 1; ND means not detected at or above the reporting limit	W	1.0 mg/L	
	S	NA	

\* water samples reported in mg/L.

DF = Dilution Factor





## QC SUMMARY REPORT FOR E1664A

W.O. Sample Matrix: Water

QC Matrix: Water

BatchID: 71833

WorkOrder: 1210769

**EPA Method: E1664A**

**Extraction: E1664A**

**Spiked Sample ID: N/A**

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)		
	mg/L	mg/L	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS
HEM	N/A	20.83	N/A	N/A	N/A	94	N/A	N/A	70 - 130

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:  
NONE

### BATCH 71833 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1210769-001G	10/22/12 7:00 AM	10/29/12	10/30/12 6:35 PM	1210769-002G	10/22/12 8:00 AM	10/29/12	10/30/12 6:40 PM

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery =  $100 * (MS - Sample) / (Amount Spiked)$ ; RPD =  $100 * (MS - MSD) / ((MS + MSD) / 2)$ .

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

DHS ELAP Certification 1644

 QA/QC Officer



## QC SUMMARY REPORT FOR E1664A

W.O. Sample Matrix: Water

QC Matrix: Water

BatchID: 71869

WorkOrder: 1210769

EPA Method: E1664A

Extraction: E1664A

Spiked Sample ID: N/A

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)		
	mg/L	mg/L	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS
HEMSGT	N/A	10.42	N/A	N/A	N/A	91.1	N/A	N/A	70 - 130

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:  
NONE

### BATCH 71869 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1210769-003G	10/22/12 9:20 AM	10/30/12	10/31/12 9:35 AM	1210769-004G	10/22/12 9:00 AM	10/30/12	10/31/12 9:40 AM
1210769-005G	10/22/12 9:30 AM	10/30/12	10/31/12 9:45 AM	1210769-006G	10/22/12 10:00 AM	10/30/12	10/31/12 9:50 AM
1210769-007G	10/22/12 10:30 AM	10/30/12	10/31/12 9:55 AM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.


% Recovery =  $100 * (MS - Sample) / (Amount Spiked)$ ; RPD =  $100 * (MS - MSD) / ((MS + MSD) / 2)$ .

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

DHS ELAP Certification 1644

 QA/QC Officer



## QC SUMMARY REPORT FOR SW8081A

W.O. Sample Matrix: Water

QC Matrix: Water

BatchID: 71830

WorkOrder: 1210769

EPA Method: SW8081A		Extraction: SW3510C					Spiked Sample ID: N/A		
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)		
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS
Aldrin	N/A	1.25	N/A	N/A	N/A	87.4	N/A	N/A	70 - 130
g-BHC	N/A	1.25	N/A	N/A	N/A	89.4	N/A	N/A	70 - 130
p,p-DDT	N/A	1.25	N/A	N/A	N/A	72.8	N/A	N/A	70 - 130
Dieldrin	N/A	1.25	N/A	N/A	N/A	95.1	N/A	N/A	70 - 130
Endrin	N/A	1.25	N/A	N/A	N/A	88.7	N/A	N/A	70 - 130
Heptachlor	N/A	1.25	N/A	N/A	N/A	72.1	N/A	N/A	70 - 130
%SS:	N/A	1.25	N/A	N/A	N/A	109	N/A	N/A	70 - 130
All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions: NONE									

### BATCH 71830 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1210769-001I	10/22/12 7:00 AM	10/23/12	10/24/12 1:12 PM	1210769-002I	10/22/12 8:00 AM	10/23/12	10/24/12 2:08 PM
1210769-003I	10/22/12 9:20 AM	10/23/12	10/24/12 3:05 PM	1210769-004I	10/22/12 9:00 AM	10/23/12	10/24/12 4:02 PM
1210769-005I	10/22/12 9:30 AM	10/23/12	10/24/12 5:55 PM	1210769-006I	10/22/12 10:00 AM	10/23/12	10/24/12 6:51 PM
1210769-007I	10/22/12 10:30 AM	10/23/12	10/24/12 7:47 PM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery =  $100 * (MS - Sample) / (Amount Spiked)$ ;  $RPD = 100 * (MS - MSD) / ((MS + MSD) / 2)$ .

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = matrix interference and/or analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.



## QC SUMMARY REPORT FOR E200.7

W.O. Sample Matrix: Water

QC Matrix: Water

BatchID: 71857

WorkOrder: 1210769

EPA Method: E200.7		Extraction: E200.7					Spiked Sample ID: 1210636-004A		
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)		
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS
Aluminum	ND	1000	96.3	98.7	2.48	95	70 - 130	20	85 - 115
Iron	ND	1000	99.7	102	18.7	99.3	70 - 130	20	85 - 115
%SS:	108	750	106	104	0.900	105	70 - 130	30	70 - 130
All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions: NONE									

### BATCH 71857 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1210769-001E	10/22/12 7:00 AM	10/23/12	10/25/12 3:48 AM	1210769-002E	10/22/12 8:00 AM	10/23/12	10/25/12 3:51 AM
1210769-003E	10/22/12 9:20 AM	10/23/12	10/25/12 3:54 AM	1210769-004E	10/22/12 9:00 AM	10/23/12	10/25/12 3:57 AM
1210769-005E	10/22/12 9:30 AM	10/23/12	10/25/12 4:08 AM	1210769-006E	10/22/12 10:00 AM	10/23/12	10/25/12 4:11 AM
1210769-007E	10/22/12 10:30 AM	10/23/12	10/25/12 4:14 AM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.


% Recovery =  $100 * (MS - Sample) / (Amount Spiked)$ ; RPD =  $100 * (MS - MSD) / ((MS + MSD) / 2)$ .

\* MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not applicable to this method.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

DHS ELAP Certification 1644

 QA/QC Officer



## QC SUMMARY REPORT FOR E410.4

W.O. Sample Matrix: Water

QC Matrix: Water

BatchID: 71967

WorkOrder: 1210769

EPA Method: SM5220D

Extraction: SM5220D

Spiked Sample ID: 1210714-001A

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)		
	mg/L	mg/L	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS
COD	95	400	90.8	88.9	1.65	98.9	80 - 120	20	90 - 110

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:  
NONE

### BATCH 71967 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1210769-001C	10/22/12 7:00 AM	10/26/12	10/26/12 11:46 AM	1210769-002C	10/22/12 8:00 AM	10/26/12	10/26/12 11:52 AM
1210769-003C	10/22/12 9:20 AM	10/26/12	10/26/12 11:58 AM	1210769-004C	10/22/12 9:00 AM	10/26/12	10/26/12 12:04 PM
1210769-005C	10/22/12 9:30 AM	10/26/12	10/26/12 12:10 PM	1210769-006C	10/22/12 10:00 AM	10/26/12	10/26/12 12:16 PM
1210769-007C	10/22/12 10:30 AM	10/26/12	10/26/12 12:22 PM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery =  $100 * (MS - Sample) / (Amount Spiked)$ ; RPD =  $100 * (MS - MSD) / ((MS + MSD) / 2)$ .

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

DHS ELAP Certification 1644

 QA/QC Officer





## QC SUMMARY REPORT FOR SW8260B

W.O. Sample Matrix: Water

QC Matrix: Water

BatchID: 71937

WorkOrder: 1210769

**EPA Method: SW8260B**      **Extraction: SW5030B**      **Spiked Sample ID: 1210769-001B**

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)		
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS
Benzene	ND	10	101	101	0	97.2	70 - 130	20	70 - 130
Methyl-t-butyl ether (MTBE)	ND	10	95	98.1	3.16	86.9	70 - 130	20	70 - 130
Toluene	ND	10	98.4	97.5	0.848	97.3	70 - 130	20	70 - 130
%SS1:	100	25	101	101	0	100	70 - 130	20	70 - 130
%SS2:	100	25	101	101	0	104	70 - 130	20	70 - 130

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:  
NONE

### BATCH 71937 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1210769-001B	10/22/12 7:00 AM	10/24/12	10/24/12 2:39 PM	1210769-002B	10/22/12 8:00 AM	10/25/12	10/25/12 3:34 AM
1210769-003B	10/22/12 9:20 AM	10/25/12	10/25/12 4:13 AM	1210769-004B	10/22/12 9:00 AM	10/25/12	10/25/12 4:51 AM
1210769-005B	10/22/12 9:30 AM	10/25/12	10/25/12 5:30 AM	1210769-006B	10/22/12 10:00 AM	10/25/12	10/25/12 6:09 AM
1210769-007B	10/22/12 10:30 AM	10/25/12	10/25/12 6:48 AM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery =  $100 * (MS - Sample) / (Amount Spiked)$ ;  $RPD = 100 * (MS - MSD) / ((MS + MSD) / 2)$ .

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

Laboratory extraction solvents such as methylene chloride and acetone may occasionally appear in the method blank at low levels.



## QC SUMMARY REPORT FOR E200.8

W.O. Sample Matrix: Water

QC Matrix: Water

BatchID: 71875

WorkOrder: 1210769

EPA Method: E200.8

Extraction: E200.8

Spiked Sample ID: 1210636-005A

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)		
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS
Copper	6.4	50	86.7	85.8	0.928	94.4	70 - 130	20	85 - 115
Lead	ND	50	89.1	89.2	0.112	90.8	70 - 130	20	85 - 115
Vanadium	3.0	50	89.7	88.2	1.56	91.8	70 - 130	20	85 - 115
Zinc	ND	500	89	88.6	0.402	95.1	70 - 130	20	85 - 115
%SS:	88	750	86	85	1.66	87	70 - 130	20	70 - 130

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:  
NONE

### BATCH 71875 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1210769-001E	10/22/12 7:00 AM	10/23/12	10/24/12 11:45 PM	1210769-002E	10/22/12 8:00 AM	10/23/12	10/24/12 11:52 PM
1210769-002E	10/22/12 8:00 AM	10/23/12	10/25/12 6:29 PM	1210769-003E	10/22/12 9:20 AM	10/23/12	10/25/12
1210769-004E	10/22/12 9:00 AM	10/23/12	10/25/12 12:08 AM	1210769-004E	10/22/12 9:00 AM	10/23/12	10/25/12 6:37 PM
1210769-005E	10/22/12 9:30 AM	10/23/12	10/25/12 12:16 AM	1210769-006E	10/22/12 10:00 AM	10/23/12	10/25/12 12:24 AM
1210769-006E	10/22/12 10:00 AM	10/23/12	10/25/12 6:45 PM	1210769-007E	10/22/12 10:30 AM	10/23/12	10/25/12 12:31 AM

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery =  $100 * (MS - Sample) / (Amount Spiked)$ ;  $RPD = 100 * (MS - MSD) / ((MS + MSD) / 2)$ .

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not applicable to this method.

NR = matrix interference and/or analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.



## QC SUMMARY REPORT FOR WET CHEMISTRY TESTS

**Test Method:** SM2510B (Specific Conductivity)

**Matrix:** W

**WorkOrder:** 1210769

Method Name: SM2510B			Units: µmhos/cm @ 25°C			BatchID: 71919
Lab ID	Sample	DF	Dup / Ser. Dil.	DF	% RPD	Acceptance Criteria (%)
1210769-001D	130 @ 25.0°C	1	130 @ 25.0°C	1	0.538	<2
1210769-002D	202 @ 25.0°C	1	203 @ 25.0°C	1	0.247	<2
1210769-003D	631 @ 25.0°C	1	633 @ 25.0°C	1	0.285	<2
1210769-004D	1070 @ 25.0°C	1	1080 @ 25.0°C	1	0.651	<2
1210769-005D	150 @ 25.0°C	1	151 @ 25.0°C	1	0.733	<2

### BATCH 71919 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1210769-001D	10/22/12 7:00 AM	10/24/12	10/24/12 3:40 PM	1210769-002D	10/22/12 8:00 AM	10/24/12	10/24/12 3:50 PM
1210769-003D	10/22/12 9:20 AM	10/24/12	10/24/12 4:00 PM	1210769-004D	10/22/12 9:00 AM	10/24/12	10/24/12 4:10 PM
1210769-005D	10/22/12 9:30 AM	10/24/12	10/24/12 4:20 PM				

**Test Method:** SM2510B (Specific Conductivity)

**Matrix:** W

**WorkOrder:** 1210769

Method Name: SM2510B			Units: µmhos/cm @ 25°C			BatchID: 71920
Lab ID	Sample	DF	Dup / Ser. Dil.	DF	% RPD	Acceptance Criteria (%)
1210769-006D	591 @ 25.0°C	1	592 @ 25.0°C	1	0.203	<2
1210769-007D	165 @ 25.0°C	1	166 @ 25.0°C	1	0.786	<2

### BATCH 71920 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1210769-006D	10/22/12 10:00 AM	10/24/12	10/24/12 4:30 PM	1210769-007D	10/22/12 10:30 AM	10/24/12	10/24/12 4:40 PM

Dup = Duplicate; SD = Serial Dilution; MS = Matrix Spike; RD = Relative Difference; RPD = Relative Percent Deviation.

Precision = Absolute Value (Sample - Duplicate)

RPD =  $100 * (\text{Sample} - \text{Duplicate}) / [(\text{Sample} + \text{Duplicate}) / 2]$

%RPD is calculated using results of up to 10 significant figures, however the reported results are rounded to 2 or 3 significant figures. Therefore there may be a slight discrepancy between the %RPD displayed above and %RPD calculated using the reported results. MAI considers %RPD based upon more significant figures to be more accurate.



## QC SUMMARY REPORT FOR E415.3

W.O. Sample Matrix: Water

QC Matrix: Water

BatchID: 71895

WorkOrder: 1210769

EPA Method: E415.3

Extraction: E415.3

Spiked Sample ID: 1210779-002A

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)		
	mg/L	mg/L	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS
TOC	18	50	101	100	0.219	101	70 - 130	20	80 - 120

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:  
NONE

### BATCH 71895 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1210769-001A	10/22/12 7:00 AM	10/24/12	10/24/12 2:14 PM	1210769-002A	10/22/12 8:00 AM	10/24/12	10/24/12 2:26 PM
1210769-003A	10/22/12 9:20 AM	10/24/12	10/24/12 2:40 PM	1210769-004A	10/22/12 9:00 AM	10/24/12	10/24/12 3:24 PM
1210769-005A	10/22/12 9:30 AM	10/24/12	10/24/12 3:36 PM	1210769-006A	10/22/12 10:00 AM	10/24/12	10/24/12 3:47 PM
1210769-007A	10/22/12 10:30 AM	10/24/12	10/24/12 4:00 PM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery =  $100 * (MS - Sample) / (Amount Spiked)$ ; RPD =  $100 * (MS - MSD) / ((MS + MSD) / 2)$ .

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not applicable to this method.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

DHS ELAP Certification 1644

 QA/QC Officer



## QC SUMMARY REPORT FOR SW8015B

W.O. Sample Matrix: Water

QC Matrix: Water

BatchID: 71829

WorkOrder: 1210769

EPA Method: SW8015B

Extraction: SW3510C

Spiked Sample ID: N/A

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)		
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS
TPH-Diesel (C10-C23)	N/A	1000	N/A	N/A	N/A	109	N/A	N/A	70 - 130
%SS:	N/A	625	N/A	N/A	N/A	88	N/A	N/A	70 - 130
All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions: NONE									

### BATCH 71829 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1210769-001H	10/22/12 7:00 AM	10/23/12	10/25/12 5:01 AM	1210769-002H	10/22/12 8:00 AM	10/23/12	10/24/12 7:03 PM
1210769-003H	10/22/12 9:20 AM	10/23/12	10/24/12 5:57 PM	1210769-004H	10/22/12 9:00 AM	10/23/12	10/24/12 10:22 PM
1210769-005H	10/22/12 9:30 AM	10/23/12	10/24/12 8:09 PM	1210769-006H	10/22/12 10:00 AM	10/23/12	10/24/12 5:57 PM
1210769-007H	10/22/12 10:30 AM	10/23/12	10/25/12 6:07 AM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery =  $100 * (MS - Sample) / (Amount Spiked)$ ; RPD =  $100 * (MS - MSD) / ((MS + MSD) / 2)$ .

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.





## QC SUMMARY REPORT FOR WET CHEMISTRY TESTS

**Test Method:** SM2540D (TSS)

**Matrix:** W

**WorkOrder:** 1210769

Method Name: SM2540D			Units: mg/L			BatchID: 71935
Lab ID	Sample	DF	Dup / Ser. Dil.	DF	% RPD	Acceptance Criteria (%)
1210769-002F	446	20	450	20	0.893	<15
1210769-003F	77.0	10	75.0	10	2.63	<15

### BATCH 71935 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1210769-002F	10/22/12 8:00 AM	10/26/12	10/26/12 7:00 PM	1210769-003F	10/22/12 9:20 AM	10/26/12	10/26/12 7:10 PM

**Test Method:** SM2540D (TSS)

**Matrix:** W

**WorkOrder:** 1210769

Method Name: SM2540D			Units: mg/L			BatchID: 71966
Lab ID	Sample	DF	Dup / Ser. Dil.	DF	% RPD	Acceptance Criteria (%)
1210769-001F	41.0	5	43.0	5	4.76	<15

### BATCH 71966 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1210769-001F	10/22/12 7:00 AM	10/26/12	10/26/12 8:25 PM				

**Test Method:** SM2540D (TSS)

**Matrix:** W

**WorkOrder:** 1210769

Method Name: SM2540D			Units: mg/L			BatchID: 71998
Lab ID	Sample	DF	Dup / Ser. Dil.	DF	% RPD	Acceptance Criteria (%)
1210769-004F	58.5	5	61.0	5	4.18	<15
1210769-005F	52.4	2	52.0	2	0.766	<15
1210769-006F	111	5	114	5	2.68	<15
1210769-007F	110	5	110	5	0	<15

### BATCH 71998 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1210769-004F	10/22/12 9:00 AM	10/26/12	10/26/12 7:20 PM	1210769-005F	10/22/12 9:30 AM	10/26/12	10/26/12 7:30 PM
1210769-006F	10/22/12 10:00 AM	10/26/12	10/26/12 7:40 PM	1210769-007F	10/22/12 10:30 AM	10/26/12	10/26/12 7:50 PM

Dup = Duplicate; Ser. Dil. = Serial Dilution; MS = Matrix Spike; RD = Relative Difference; RPD = Relative Percent Deviation.

Precision = Absolute Value (Sample - Duplicate)

RPD =  $100 * (\text{Sample} - \text{Duplicate}) / [(\text{Sample} + \text{Duplicate}) / 2]$

%RPD is calculated using results of up to 10 significant figures, however the reported results are rounded to 2 or 3 significant figures. Therefore there may be a slight discrepancy between the %RPD displayed above and %RPD calculated using the reported results. MAI considers %RPD based upon more significant figures to be more accurate.



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**Laboratory Job Number 241066  
ANALYTICAL REPORT**

Environmental Tech. Services  
1548 Jacob Avenue  
San Jose, CA 95118

Project : STANDARD  
Location : ETS-LRT  
Level : II

<u>Sample ID</u>	<u>Lab ID</u>
SW1	241066-001
SW2	241066-002
SW3	241066-003
SW4	241066-004
SW5	241066-005
SPARRSW11	241066-006
NPARRSW12	241066-007

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: \_\_\_\_\_

Tracy Babjar  
Project Manager  
(510) 204-2226

Date: 11/14/2012

NELAP # 01107CA

### CASE NARRATIVE

Laboratory number: 241066  
Client: Environmental Tech. Services  
Location: ETS-LRT  
Request Date: 11/07/12  
Samples Received: 11/07/12

This data package contains sample and QC results for six water samples, requested for the above referenced project on 11/07/12. The samples were received cold and intact.

**Pesticides (EPA 8081A):**

All samples underwent sulfur cleanup using the copper option in EPA Method 3660B. Many samples were prepared outside of hold time; affected data was qualified with "b". A number of samples were diluted due to the color of the sample extracts. No other analytical problems were encountered.

# CHAIN OF CUSTODY



**ENVIRONMENTAL ANALYTICAL TESTING LABORATORY**  
In Business Since 1978

2323 Fifth Street  
Berkeley, CA 94710

Phone (510) 486-0900  
Fax (510) 486-0532

Project No: ETS-LRT

Sampler: John M

Project Name: ETS

Report To: ETS

Project P. O. No:

Company: ETS

EDD Format: Report Level ☐ I ☐ II ☐ III ☐ IV

Telephone: 831 236 9221

Turnaround Time: 5 days ☐ Standard

Email: hmanhunny@etsaol.com

Page      of     

Chain of Custody #     

C&T LOGIN # 241066

## ANALYTICAL REQUEST

8081	Sw1	Sw2	Sw3	Sw4	Sw5	Sw6	Sw7	Sw8	Sw9	Sw10	Sw11	Sw12	Sw13	Sw14	Sw15	Sw16	Sw17	Sw18	Sw19	Sw20	Sw21	Sw22	Sw23	Sw24	Sw25	Sw26	Sw27	Sw28	Sw29	Sw30	Sw31	Sw32	Sw33	Sw34	Sw35	Sw36	Sw37	Sw38	Sw39	Sw40	Sw41	Sw42	Sw43	Sw44	Sw45	Sw46	Sw47	Sw48	Sw49	Sw50	Sw51	Sw52	Sw53	Sw54	Sw55	Sw56	Sw57	Sw58	Sw59	Sw60	Sw61	Sw62	Sw63	Sw64	Sw65	Sw66	Sw67	Sw68	Sw69	Sw70	Sw71	Sw72	Sw73	Sw74	Sw75	Sw76	Sw77	Sw78	Sw79	Sw80	Sw81	Sw82	Sw83	Sw84	Sw85	Sw86	Sw87	Sw88	Sw89	Sw90	Sw91	Sw92	Sw93	Sw94	Sw95	Sw96	Sw97	Sw98	Sw99	Sw100	Sw101	Sw102	Sw103	Sw104	Sw105	Sw106	Sw107	Sw108	Sw109	Sw110	Sw111	Sw112	Sw113	Sw114	Sw115	Sw116	Sw117	Sw118	Sw119	Sw120	Sw121	Sw122	Sw123	Sw124	Sw125	Sw126	Sw127	Sw128	Sw129	Sw130	Sw131	Sw132	Sw133	Sw134	Sw135	Sw136	Sw137	Sw138	Sw139	Sw140	Sw141	Sw142	Sw143	Sw144	Sw145	Sw146	Sw147	Sw148	Sw149	Sw150	Sw151	Sw152	Sw153	Sw154	Sw155	Sw156	Sw157	Sw158	Sw159	Sw160	Sw161	Sw162	Sw163	Sw164	Sw165	Sw166	Sw167	Sw168	Sw169	Sw170	Sw171	Sw172	Sw173	Sw174	Sw175	Sw176	Sw177	Sw178	Sw179	Sw180	Sw181	Sw182	Sw183	Sw184	Sw185	Sw186	Sw187	Sw188	Sw189	Sw190	Sw191	Sw192	Sw193	Sw194	Sw195	Sw196	Sw197	Sw198	Sw199	Sw200	Sw201	Sw202	Sw203	Sw204	Sw205	Sw206	Sw207	Sw208	Sw209	Sw210	Sw211	Sw212	Sw213	Sw214	Sw215	Sw216	Sw217	Sw218	Sw219	Sw220	Sw221	Sw222	Sw223	Sw224	Sw225	Sw226	Sw227	Sw228	Sw229	Sw230	Sw231	Sw232	Sw233	Sw234	Sw235	Sw236	Sw237	Sw238	Sw239	Sw240	Sw241	Sw242	Sw243	Sw244	Sw245	Sw246	Sw247	Sw248	Sw249	Sw250	Sw251	Sw252	Sw253	Sw254	Sw255	Sw256	Sw257	Sw258	Sw259	Sw260	Sw261	Sw262	Sw263	Sw264	Sw265	Sw266	Sw267	Sw268	Sw269	Sw270	Sw271	Sw272	Sw273	Sw274	Sw275	Sw276	Sw277	Sw278	Sw279	Sw280	Sw281	Sw282	Sw283	Sw284	Sw285	Sw286	Sw287	Sw288	Sw289	Sw290	Sw291	Sw292	Sw293	Sw294	Sw295	Sw296	Sw297	Sw298	Sw299	Sw300	Sw301	Sw302	Sw303	Sw304	Sw305	Sw306	Sw307	Sw308	Sw309	Sw310	Sw311	Sw312	Sw313	Sw314	Sw315	Sw316	Sw317	Sw318	Sw319	Sw320	Sw321	Sw322	Sw323	Sw324	Sw325	Sw326	Sw327	Sw328	Sw329	Sw330	Sw331	Sw332	Sw333	Sw334	Sw335	Sw336	Sw337	Sw338	Sw339	Sw340	Sw341	Sw342	Sw343	Sw344	Sw345	Sw346	Sw347	Sw348	Sw349	Sw350	Sw351	Sw352	Sw353	Sw354	Sw355	Sw356	Sw357	Sw358	Sw359	Sw360	Sw361	Sw362	Sw363	Sw364	Sw365	Sw366	Sw367	Sw368	Sw369	Sw370	Sw371	Sw372	Sw373	Sw374	Sw375	Sw376	Sw377	Sw378	Sw379	Sw380	Sw381	Sw382	Sw383	Sw384	Sw385	Sw386	Sw387	Sw388	Sw389	Sw390	Sw391	Sw392	Sw393	Sw394	Sw395	Sw396	Sw397	Sw398	Sw399	Sw400	Sw401	Sw402	Sw403	Sw404	Sw405	Sw406	Sw407	Sw408	Sw409	Sw410	Sw411	Sw412	Sw413	Sw414	Sw415	Sw416	Sw417	Sw418	Sw419	Sw420	Sw421	Sw422	Sw423	Sw424	Sw425	Sw426	Sw427	Sw428	Sw429	Sw430	Sw431	Sw432	Sw433	Sw434	Sw435	Sw436	Sw437	Sw438	Sw439	Sw440	Sw441	Sw442	Sw443	Sw444	Sw445	Sw446	Sw447	Sw448	Sw449	Sw450	Sw451	Sw452	Sw453	Sw454	Sw455	Sw456	Sw457	Sw458	Sw459	Sw460	Sw461	Sw462	Sw463	Sw464	Sw465	Sw466	Sw467	Sw468	Sw469	Sw470	Sw471	Sw472	Sw473	Sw474	Sw475	Sw476	Sw477	Sw478	Sw479	Sw480	Sw481	Sw482	Sw483	Sw484	Sw485	Sw486	Sw487	Sw488	Sw489	Sw490	Sw491	Sw492	Sw493	Sw494	Sw495	Sw496	Sw497	Sw498	Sw499	Sw500	Sw501	Sw502	Sw503	Sw504	Sw505	Sw506	Sw507	Sw508	Sw509	Sw510	Sw511	Sw512	Sw513	Sw514	Sw515	Sw516	Sw517	Sw518	Sw519	Sw520	Sw521	Sw522	Sw523	Sw524	Sw525	Sw526	Sw527	Sw528	Sw529	Sw530	Sw531	Sw532	Sw533	Sw534	Sw535	Sw536	Sw537	Sw538	Sw539	Sw540	Sw541	Sw542	Sw543	Sw544	Sw545	Sw546	Sw547	Sw548	Sw549	Sw550	Sw551	Sw552	Sw553	Sw554	Sw555	Sw556	Sw557	Sw558	Sw559	Sw560	Sw561	Sw562	Sw563	Sw564	Sw565	Sw566	Sw567	Sw568	Sw569	Sw570	Sw571	Sw572	Sw573	Sw574	Sw575	Sw576	Sw577	Sw578	Sw579	Sw580	Sw581	Sw582	Sw583	Sw584	Sw585	Sw586	Sw587	Sw588	Sw589	Sw590	Sw591	Sw592	Sw593	Sw594	Sw595	Sw596	Sw597	Sw598	Sw599	Sw600	Sw601	Sw602	Sw603	Sw604	Sw605	Sw606	Sw607	Sw608	Sw609	Sw610	Sw611	Sw612	Sw613	Sw614	Sw615	Sw616	Sw617	Sw618	Sw619	Sw620	Sw621	Sw622	Sw623	Sw624	Sw625	Sw626	Sw627	Sw628	Sw629	Sw630	Sw631	Sw632	Sw633	Sw634	Sw635	Sw636	Sw637	Sw638	Sw639	Sw640	Sw641	Sw642	Sw643	Sw644	Sw645	Sw646	Sw647	Sw648	Sw649	Sw650	Sw651	Sw652	Sw653	Sw654	Sw655	Sw656	Sw657	Sw658	Sw659	Sw660	Sw661	Sw662	Sw663	Sw664	Sw665	Sw666	Sw667	Sw668	Sw669	Sw670	Sw671	Sw672	Sw673	Sw674	Sw675	Sw676	Sw677	Sw678	Sw679	Sw680	Sw681	Sw682	Sw683	Sw684	Sw685	Sw686	Sw687	Sw688	Sw689	Sw690	Sw691	Sw692	Sw693	Sw694	Sw695	Sw696	Sw697	Sw698	Sw699	Sw700	Sw701	Sw702	Sw703	Sw704	Sw705	Sw706	Sw707	Sw708	Sw709	Sw710	Sw711	Sw712	Sw713	Sw714	Sw715	Sw716	Sw717	Sw718	Sw719	Sw720	Sw721	Sw722	Sw723	Sw724	Sw725	Sw726	Sw727	Sw728	Sw729	Sw730	Sw731	Sw732	Sw733	Sw734	Sw735	Sw736	Sw737	Sw738	Sw739	Sw740	Sw741	Sw742	Sw743	Sw744	Sw745	Sw746	Sw747	Sw748	Sw749	Sw750	Sw751	Sw752	Sw753	Sw754	Sw755	Sw756	Sw757	Sw758	Sw759	Sw760	Sw761	Sw762	Sw763	Sw764	Sw765	Sw766	Sw767	Sw768	Sw769	Sw770	Sw771	Sw772	Sw773	Sw774	Sw775	Sw776	Sw777	Sw778	Sw779	Sw780	Sw781	Sw782	Sw783	Sw784	Sw785	Sw786	Sw787	Sw788	Sw789	Sw790	Sw791	Sw792	Sw793	Sw794	Sw795	Sw796	Sw797	Sw798	Sw799	Sw800	Sw801	Sw802	Sw803	Sw804	Sw805	Sw806	Sw807	Sw808	Sw809	Sw810	Sw811	Sw812	Sw813	Sw814	Sw815	Sw816	Sw817	Sw818	Sw819	Sw820	Sw821	Sw822	Sw823	Sw824	Sw825	Sw826	Sw827	Sw828	Sw829	Sw830	Sw831	Sw832	Sw833	Sw834	Sw835	Sw836	Sw837	Sw838	Sw839	Sw840	Sw841	Sw842	Sw843	Sw844	Sw845	Sw846	Sw847	Sw848	Sw849	Sw850	Sw851	Sw852	Sw853	Sw854	Sw855	Sw856	Sw857	Sw858	Sw859	Sw860	Sw861	Sw862	Sw863	Sw864	Sw865	Sw866	Sw867	Sw868	Sw869	Sw870	Sw871	Sw872	Sw873	Sw874	Sw875	Sw876	Sw877	Sw878	Sw879	Sw880	Sw881	Sw882	Sw883	Sw884	Sw885	Sw886	Sw887	Sw888	Sw889	Sw890	Sw891	Sw892	Sw893	Sw894	Sw895	Sw896	Sw897	Sw898	Sw899	Sw900	Sw901	Sw902	Sw903	Sw904	Sw905	Sw906	Sw907	Sw908	Sw909	Sw910	Sw911	Sw912	Sw913	Sw914	Sw915	Sw916	Sw917	Sw918	Sw919	Sw920	Sw921	Sw922	Sw923	Sw924	Sw925	Sw926	Sw927	Sw928	Sw929	Sw930	Sw931	Sw932	Sw933	Sw934	Sw935	Sw936	Sw937	Sw938	Sw939	Sw940	Sw941	Sw942	Sw943	Sw944	Sw945	Sw946	Sw947	Sw948	Sw949	Sw950	Sw951	Sw952	Sw953	Sw954	Sw955	Sw956	Sw957	Sw958	Sw959	Sw960	Sw961	Sw962	Sw963	Sw964	Sw965	Sw966	Sw967	Sw968	Sw969	Sw970	Sw971	Sw972	Sw973	Sw974	Sw975	Sw976	Sw977	Sw978	Sw979	Sw980	Sw981	Sw982	Sw983	Sw984	Sw985	Sw986	Sw987	Sw988	Sw989	Sw990	Sw991	Sw992	Sw993	Sw994	Sw995	Sw996	Sw997	Sw998	Sw999	Sw1000	Sw1001	Sw1002	Sw1003	Sw1004	Sw1005	Sw1006	Sw1007	Sw1008	Sw1009	Sw1010	Sw1011	Sw1012	Sw1013	Sw1014	Sw1015	Sw1016	Sw1017	Sw1018	Sw1019	Sw1020	Sw1021	Sw1022	Sw1023	Sw1024	Sw1025	Sw1026	Sw1027	Sw1028	Sw1029	Sw1030	Sw1031	Sw1032	Sw1033	Sw1034	Sw1035	Sw1036	Sw1037	Sw1038	Sw1039	Sw1040	Sw1041	Sw1042	Sw1043	Sw1044	Sw1045	Sw1046	Sw1047	Sw1048	Sw1049	Sw1050	Sw1051	Sw1052	Sw1053	Sw1054	Sw1055	Sw1056	Sw1057	Sw1058	Sw1059	Sw1060	Sw1061	Sw1062	Sw1063	Sw1064	Sw1065	Sw1066	Sw1067	Sw1068	Sw1069	Sw1070	Sw1071	Sw1072	Sw1073	Sw1074	Sw1075	Sw1076	Sw1077	Sw1078	Sw1079	Sw1080	Sw1081	Sw1082	Sw1083	Sw1084	Sw1085	Sw1086	Sw1087	Sw1088	Sw1089	Sw1090	Sw1091	Sw1092	Sw1093	Sw1094	Sw1095	Sw1096	Sw1097	Sw1098	Sw1099	Sw1100	Sw1101	Sw1102	Sw1103	Sw1104	Sw1105	Sw1106	Sw1107	Sw1108	Sw1109	Sw1110	Sw1111	Sw1112	Sw1113	Sw1114	Sw1115	Sw1116	Sw1117	Sw1118	Sw1119	Sw1120	Sw1121	Sw1122	Sw1123	Sw1124	Sw1125	Sw1126	Sw1127	Sw1128	Sw1129	Sw1130	Sw1131	Sw1132	Sw1133	Sw1134	Sw1135	Sw1136	Sw1137	Sw1138	Sw1139	Sw1140	Sw1141	Sw1142	Sw1143	Sw1144	Sw1145	Sw1146	Sw1147	Sw1148	Sw1149	Sw1150	Sw1151	Sw1152	Sw1153	Sw1154	Sw1155	Sw1156	Sw1157	Sw1158	Sw1159	Sw1160	Sw1161	Sw1162	Sw1163	Sw1164	Sw1165	Sw1166	Sw1167	Sw1168	Sw1169	Sw1170	Sw1171	Sw1172	Sw1173	Sw1174	Sw1175	Sw1176	Sw1177	Sw1178	Sw1179	Sw1180	Sw1181	Sw1182	Sw1183	Sw1184	Sw1185	Sw1186	Sw1187	Sw1188	Sw1189	Sw1190	Sw1191	Sw1192	Sw1193	Sw1194	Sw1195	Sw1196	Sw1197	Sw1198	Sw1199	Sw1200	Sw1201	Sw1202	Sw1203	Sw1204	Sw1205	Sw1206	Sw1207	Sw1208	Sw1209	Sw1210	Sw1211	Sw1212	Sw1213	Sw1214	Sw1215	Sw1216	Sw1217	Sw1218	Sw1219	Sw1220	Sw1221	Sw1222	Sw1223	Sw1224	Sw1225	Sw1226	Sw1227	Sw1228	Sw1229	Sw1230	Sw1231	Sw1232	Sw1233	Sw1234	Sw1235	Sw1236	Sw1237	Sw1238	Sw1239	Sw1240	Sw1241	Sw1242	Sw1243	Sw1244	Sw1245	Sw1246	Sw1247	Sw1248	Sw1249	Sw1250	Sw1251	Sw1252	Sw1253	Sw1254	Sw1255	Sw1256	Sw1257	Sw1258	Sw1259	Sw1260	Sw1261	Sw1262	Sw1263	Sw1264	Sw1265	Sw1266	Sw1267	Sw1268	Sw1269	Sw1270	Sw1271	Sw1272	Sw1273	Sw1274	Sw1275	Sw1276	Sw1277	Sw1278	Sw1279	Sw1280	Sw1281	Sw1282	Sw1283	Sw1284	Sw1285	Sw1286	Sw1287	Sw1288	Sw1289	Sw1290	Sw1291	Sw1292	Sw1293	Sw1294	Sw1295	Sw1296	Sw1297	Sw1298	Sw1299	Sw1300	Sw1301	Sw1302	Sw1303	Sw1304	Sw1305	Sw1306	Sw1307	Sw1308	Sw1309	Sw1310	Sw1311	Sw1312	Sw1313	Sw1314	Sw1315	Sw1316	Sw1317	Sw1318	Sw1319	Sw1320	Sw1321	Sw1322	Sw1323	Sw1324	Sw1325	Sw1326	Sw1327	Sw1328	Sw1329	Sw1330	Sw1331	Sw1332	Sw1333	Sw1334	Sw1335	Sw1336	Sw1337	Sw1338	Sw1339	Sw1340	Sw1341	Sw1342	Sw1343	Sw1344	Sw1345	Sw1346	Sw1347	Sw1348</
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## COOLER RECEIPT CHECKLIST



Curtis &amp; Tompkins, Ltd.

Login # 241066 Date Received 11/5/12 Number of coolers 1  
 Client ETS Project ETS

Date Opened 11/5/12 By (print) MM (sign) [Signature]  
 Date Logged in 11/7/12 By (print) EL (sign) [Signature]

1. Did cooler come with a shipping slip (airbill, etc) YES (NO)  
 Shipping info \_\_\_\_\_

2A. Were custody seals present? .... ☐ YES (circle) on cooler on samples ☒ NO  
 How many \_\_\_\_\_ Name \_\_\_\_\_ Date \_\_\_\_\_

2B. Were custody seals intact upon arrival? \_\_\_\_\_ YES NO N/A

3. Were custody papers dry and intact when received? YES NO

4. Were custody papers filled out properly (ink, signed, etc)? YES NO

5. Is the project identifiable from custody papers? (If so fill out top of form) YES NO

6. Indicate the packing in cooler: (if other, describe) \_\_\_\_\_

☒ Bubble Wrap ☐ Foam blocks ☐ Bags ☐ None  
☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation: \* Notify PM if temperature exceeds 6°C

Type of ice used: ☒ Wet ☐ Blue/Gel ☐ None Temp(°C) 4

☒ Samples Received on ice & cold without a temperature blank; temp. taken with IR gun

☐ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? \_\_\_\_\_ YES (NO)

If YES, what time were they transferred to freezer? \_\_\_\_\_

9. Did all bottles arrive unbroken/unopened? YES NO

10. Are there any missing / extra samples? YES (NO)

11. Are samples in the appropriate containers for indicated tests? YES NO

12. Are sample labels present, in good condition and complete? YES NO

13. Do the sample labels agree with custody papers? YES NO

14. Was sufficient amount of sample sent for tests requested? YES NO

15. Are the samples appropriately preserved? \_\_\_\_\_ YES NO N/A

16. Did you check preservatives for all bottles for each sample? \_\_\_\_\_ YES NO N/A

17. Did you document your preservative check? \_\_\_\_\_ YES NO N/A

18. Did you change the hold time in LIMS for unpreserved VOAs? \_\_\_\_\_ YES NO N/A

19. Did you change the hold time in LIMS for preserved terracores? \_\_\_\_\_ YES NO N/A

20. Are bubbles > 6mm absent in VOA samples? \_\_\_\_\_ YES NO N/A

21. Was the client contacted concerning this sample delivery? \_\_\_\_\_ YES (NO)

If YES, Who was called? T. B. Boy By Helen Date: 11/7/12

## COMMENTS

analyze on 5 day rush  
DOT 8021 - Hold sample SW12



Organochlorine Pesticides			
Lab #:	241066	Location:	ETS-LRT
Client:	Environmental Tech. Services	Prep:	EPA 3520C
Project#:	STANDARD	Analysis:	EPA 8081A
Field ID:	SW1	Batch#:	192730
Lab ID:	241066-001	Sampled:	10/22/12
Matrix:	Water	Received:	11/07/12
Units:	ug/L	Prepared:	11/11/12
Diln Fac:	1.000	Analyzed:	11/12/12

Analyte	Result	RL
alpha-BHC	ND b	0.05
beta-BHC	ND b	0.05
gamma-BHC	ND b	0.05
delta-BHC	ND b	0.05
Heptachlor	ND b	0.05
Aldrin	ND b	0.05
Heptachlor epoxide	ND b	0.05
Endosulfan I	ND b	0.05
Dieldrin	ND b	0.1
4,4'-DDE	ND b	0.1
Endrin	ND b	0.1
Endosulfan II	ND b	0.1
Endosulfan sulfate	ND b	0.1
4,4'-DDD	ND b	0.1
Endrin aldehyde	ND b	0.1
4,4'-DDT	ND b	0.1
alpha-Chlordane	ND b	0.05
gamma-Chlordane	ND b	0.05
Methoxychlor	ND b	0.5
Toxaphene	ND b	1.0

Surrogate	%REC	Limits
TCMX	67 b	26-128
Decachlorobiphenyl	34 b	29-122

b= See narrative  
ND= Not Detected  
RL= Reporting Limit

### Organochlorine Pesticides

Lab #:	241066	Location:	ETS-LRT
Client:	Environmental Tech. Services	Prep:	EPA 3520C
Project#:	STANDARD	Analysis:	EPA 8081A
Field ID:	SW2	Batch#:	192730
Lab ID:	241066-002	Sampled:	10/22/12
Matrix:	Water	Received:	11/07/12
Units:	ug/L	Prepared:	11/11/12
Diln Fac:	3.000	Analyzed:	11/13/12

Analyte	Result	RL
alpha-BHC	ND b	0.2
beta-BHC	ND b	0.2
gamma-BHC	ND b	0.2
delta-BHC	ND b	0.2
Heptachlor	ND b	0.2
Aldrin	ND b	0.2
Heptachlor epoxide	ND b	0.2
Endosulfan I	ND b	0.2
Dieldrin	ND b	0.3
4,4'-DDE	ND b	0.3
Endrin	ND b	0.3
Endosulfan II	ND b	0.3
Endosulfan sulfate	ND b	0.3
4,4'-DDD	ND b	0.3
Endrin aldehyde	ND b	0.3
4,4'-DDT	ND b	0.3
alpha-Chlordane	ND b	0.2
gamma-Chlordane	ND b	0.2
Methoxychlor	ND b	1.5
Toxaphene	ND b	3.1

Surrogate	%REC	Limits
TCMX	60 b	26-128
Decachlorobiphenyl	36 b	29-122

b= See narrative  
ND= Not Detected  
RL= Reporting Limit

Organochlorine Pesticides			
Lab #:	241066	Location:	ETS-LRT
Client:	Environmental Tech. Services	Prep:	EPA 3520C
Project#:	STANDARD	Analysis:	EPA 8081A
Field ID:	SW3	Batch#:	192730
Lab ID:	241066-003	Sampled:	10/22/12
Matrix:	Water	Received:	11/07/12
Units:	ug/L	Prepared:	11/11/12
Diln Fac:	3.000	Analyzed:	11/13/12

Analyte	Result	RL
alpha-BHC	ND b	0.2
beta-BHC	ND b	0.2
gamma-BHC	ND b	0.2
delta-BHC	ND b	0.2
Heptachlor	ND b	0.2
Aldrin	ND b	0.2
Heptachlor epoxide	ND b	0.2
Endosulfan I	ND b	0.2
Dieldrin	ND b	0.3
4,4'-DDE	ND b	0.3
Endrin	ND b	0.3
Endosulfan II	ND b	0.3
Endosulfan sulfate	ND b	0.3
4,4'-DDD	ND b	0.3
Endrin aldehyde	ND b	0.3
4,4'-DDT	ND b	0.3
alpha-Chlordane	ND b	0.2
gamma-Chlordane	ND b	0.2
Methoxychlor	ND b	1.5
Toxaphene	ND b	3.1

Surrogate	%REC	Limits
TCMX	98 b	26-128
Decachlorobiphenyl	68 b	29-122

b= See narrative  
ND= Not Detected  
RL= Reporting Limit

### Organochlorine Pesticides

Lab #:	241066	Location:	ETS-LRT
Client:	Environmental Tech. Services	Prep:	EPA 3520C
Project#:	STANDARD	Analysis:	EPA 8081A
Field ID:	SW4	Batch#:	192730
Lab ID:	241066-004	Sampled:	10/22/12
Matrix:	Water	Received:	11/07/12
Units:	ug/L	Prepared:	11/11/12
Diln Fac:	3.000	Analyzed:	11/13/12

Analyte	Result	RL
alpha-BHC	ND b	0.2
beta-BHC	ND b	0.2
gamma-BHC	ND b	0.2
delta-BHC	ND b	0.2
Heptachlor	ND b	0.2
Aldrin	ND b	0.2
Heptachlor epoxide	ND b	0.2
Endosulfan I	ND b	0.2
Dieldrin	ND b	0.3
4,4'-DDE	ND b	0.3
Endrin	ND b	0.3
Endosulfan II	ND b	0.3
Endosulfan sulfate	ND b	0.3
4,4'-DDD	ND b	0.3
Endrin aldehyde	ND b	0.3
4,4'-DDT	ND b	0.3
alpha-Chlordane	ND b	0.2
gamma-Chlordane	ND b	0.2
Methoxychlor	ND b	1.5
Toxaphene	ND b	3.1

Surrogate	%REC	Limits
TCMX	104 b	26-128
Decachlorobiphenyl	84 b	29-122

b= See narrative

ND= Not Detected

RL= Reporting Limit

Organochlorine Pesticides			
Lab #:	241066	Location:	ETS-LRT
Client:	Environmental Tech. Services	Prep:	EPA 3520C
Project#:	STANDARD	Analysis:	EPA 8081A
Field ID:	SW5	Batch#:	192730
Lab ID:	241066-005	Sampled:	10/22/12
Matrix:	Water	Received:	11/07/12
Units:	ug/L	Prepared:	11/11/12
Diln Fac:	3.000	Analyzed:	11/13/12

Analyte	Result	RL
alpha-BHC	ND b	0.2
beta-BHC	ND b	0.2
gamma-BHC	ND b	0.2
delta-BHC	ND b	0.2
Heptachlor	ND b	0.2
Aldrin	ND b	0.2
Heptachlor epoxide	ND b	0.2
Endosulfan I	ND b	0.2
Dieldrin	ND b	0.3
4,4'-DDE	ND b	0.3
Endrin	ND b	0.3
Endosulfan II	ND b	0.3
Endosulfan sulfate	ND b	0.3
4,4'-DDD	ND b	0.3
Endrin aldehyde	ND b	0.3
4,4'-DDT	ND b	0.3
alpha-Chlordane	ND b	0.2
gamma-Chlordane	ND b	0.2
Methoxychlor	ND b	1.5
Toxaphene	ND b	3.1

Surrogate	%REC	Limits
TCMX	91 b	26-128
Decachlorobiphenyl	83 b	29-122

b= See narrative  
ND= Not Detected  
RL= Reporting Limit



Organochlorine Pesticides			
Lab #:	241066	Location:	ETS-LRT
Client:	Environmental Tech. Services	Prep:	EPA 3520C
Project#:	STANDARD	Analysis:	EPA 8081A
Field ID:	SPARRSW11	Batch#:	192730
Lab ID:	241066-006	Sampled:	10/22/12
Matrix:	Water	Received:	11/07/12
Units:	ug/L	Prepared:	11/11/12
Diln Fac:	3.000	Analyzed:	11/13/12

Analyte	Result	RL
alpha-BHC	ND b	0.2
beta-BHC	ND b	0.2
gamma-BHC	ND b	0.2
delta-BHC	ND b	0.2
Heptachlor	ND b	0.2
Aldrin	ND b	0.2
Heptachlor epoxide	ND b	0.2
Endosulfan I	ND b	0.2
Dieldrin	ND b	0.3
4,4'-DDE	ND b	0.3
Endrin	ND b	0.3
Endosulfan II	ND b	0.3
Endosulfan sulfate	ND b	0.3
4,4'-DDD	ND b	0.3
Endrin aldehyde	ND b	0.3
4,4'-DDT	ND b	0.3
alpha-Chlordane	ND b	0.2
gamma-Chlordane	ND b	0.2
Methoxychlor	ND b	1.5
Toxaphene	ND b	3.1

Surrogate	%REC	Limits
TCMX	92 b	26-128
Decachlorobiphenyl	84 b	29-122

b= See narrative  
ND= Not Detected  
RL= Reporting Limit

## Batch QC Report

Organochlorine Pesticides			
Lab #:	241066	Location:	ETS-LRT
Client:	Environmental Tech. Services	Prep:	EPA 3520C
Project#:	STANDARD	Analysis:	EPA 8081A
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC665483	Batch#:	192730
Matrix:	Water	Prepared:	11/11/12
Units:	ug/L	Analyzed:	11/12/12

Analyte	Result	RL
alpha-BHC	ND	0.05
beta-BHC	ND	0.05
gamma-BHC	ND	0.05
delta-BHC	ND	0.05
Heptachlor	ND	0.05
Aldrin	ND	0.05
Heptachlor epoxide	ND	0.05
Endosulfan I	ND	0.05
Dieldrin	ND	0.1
4,4'-DDE	ND	0.1
Endrin	ND	0.1
Endosulfan II	ND	0.1
Endosulfan sulfate	ND	0.1
4,4'-DDD	ND	0.1
Endrin aldehyde	ND	0.1
4,4'-DDT	ND	0.1
alpha-Chlordane	ND	0.05
gamma-Chlordane	ND	0.05
Methoxychlor	ND	0.5
Toxaphene	ND	1.0

Surrogate	%REC	Limits
TCMX	80	26-128
Decachlorobiphenyl	74	29-122

ND= Not Detected

RL= Reporting Limit

## Batch QC Report

Organochlorine Pesticides			
Lab #:	241066	Location:	ETS-LRT
Client:	Environmental Tech. Services	Prep:	EPA 3520C
Project#:	STANDARD	Analysis:	EPA 8081A
Matrix:	Water	Batch#:	192730
Units:	ug/L	Prepared:	11/11/12
Diln Fac:	1.000		

Type: BS Lab ID: QC665484

Analyte	Spiked	Result	%REC	Limits	Analyzed
gamma-BHC	0.2000	0.2119	106	51-142	11/12/12
Heptachlor	0.2000	0.1833	92	44-136	11/12/12
Aldrin	0.2000	0.1965	98	49-129	11/12/12
Dieldrin	0.4000	0.4760	119	51-149	11/12/12
Endrin	0.4000	0.4130	103	44-147	11/12/12
4,4'-DDT	0.4000	0.4861 #	122	44-153	11/13/12

Surrogate	%REC	Limits	Analyzed
TCMX	80	26-128	11/12/12
Decachlorobiphenyl	76	29-122	11/12/12

Type: BSD Lab ID: QC665485

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	Analyzed
gamma-BHC	0.2000	0.2072	104	51-142	2	20	11/12/12
Heptachlor	0.2000	0.1735	87	44-136	5	29	11/12/12
Aldrin	0.2000	0.1931	97	49-129	2	34	11/12/12
Dieldrin	0.4000	0.4566	114	51-149	4	37	11/12/12
Endrin	0.4000	0.3980	99	44-147	4	39	11/12/12
4,4'-DDT	0.4000	0.4213 #	105	44-153	14	37	11/13/12

Surrogate	%REC	Limits	Analyzed
TCMX	82	26-128	11/12/12
Decachlorobiphenyl	74	29-122	11/12/12

#= CCV drift outside limits; average CCV drift within limits per method requirements  
RPD= Relative Percent Difference

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Pleasanton

1220 Quarry Lane

Pleasanton, CA 94566

Tel: (925)484-1919

TestAmerica Job ID: 720-46087-1

Client Project/Site: LRT SW ANNUAL

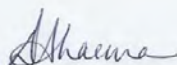
For:

Environmental Technical Services

1548 Jacob Avenue

San Jose, California 95118

Attn: Helen Mawhinney



Authorized for release by:

12/4/2012 10:08:27 AM

Dimple Sharma

Project Manager I

[dimple.sharma@testamericainc.com](mailto:dimple.sharma@testamericainc.com)

Designee for

Onieka Howard

Project Manager I

[onieka.howard@testamericainc.com](mailto:onieka.howard@testamericainc.com)

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*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*

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## Definitions/Glossary

Client: Environmental Technical Services  
Project/Site: LRT SW ANNUAL

TestAmerica Job ID: 720-46087-1

### Qualifiers

#### Metals

Qualifier	Qualifier Description
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC exceeds the control limits.

#### General Chemistry

Qualifier	Qualifier Description
F	MS or MSD exceeds the control limits

### Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDA	Minimum detectable activity
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

## Case Narrative

Client: Environmental Technical Services  
Project/Site: LRT SW ANNUAL

TestAmerica Job ID: 720-46087-1

**Job ID: 720-46087-1**

**Laboratory: TestAmerica Pleasanton**

### Narrative

#### Job Narrative 720-46087-1

#### Comments

No additional comments.

#### Receipt

The samples were received on 11/19/2012 5:56 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.0° C.

Except:

The following sample(s) were collected in improper containers for COD: LRTO SW-2, LRTO SW-4, and LRTO SW-5. Received only 2-40ml H2SO4 amber vials for TOC, after receipt the lab acidified 1-poly 250ml with Sulfuric Acid for COD.

#### GC/MS VOA

Method 8260B: The Gasoline Range Organics (GRO) concentration reported for the following sample 720-46087-3 is due to the presence of discrete peaks.

No other analytical or quality issues were noted.

#### GC Semi VOA

No analytical or quality issues were noted.

#### Metals

No analytical or quality issues were noted.

#### General Chemistry

Method 410.4: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 125964 were outside control limits due to the nature of the sample matrix. The associated laboratory control sample (LCS) recovery met acceptance criteria.

No other analytical or quality issues were noted.

#### Organic Prep

No analytical or quality issues were noted.

## Detection Summary

Client: Environmental Technical Services  
Project/Site: LRT SW ANNUAL

TestAmerica Job ID: 720-46087-1

### Client Sample ID: LRT0 SW-2

### Lab Sample ID: 720-46087-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Motor Oil Range Organics [C24-C36]	2100		100		ug/L	1			8015B	Total/NA
Aluminum	3.2		0.20		mg/L	1			200.7 Rev 4.4	Total/NA
Copper	0.024		0.020		mg/L	1			200.7 Rev 4.4	Total/NA
Iron	15		0.20		mg/L	1			200.7 Rev 4.4	Total/NA
Lead	0.035	^	0.0050		mg/L	1			200.7 Rev 4.4	Total/NA
Vanadium	0.031		0.010		mg/L	1			200.7 Rev 4.4	Total/NA
Zinc	0.22		0.020		mg/L	1			200.7 Rev 4.4	Total/NA
Chemical Oxygen Demand	280		20		mg/L	1			410.4	Total/NA
TOC Dup	6.2		1.0		mg/L	1			SM 5310C	Total/NA
Analyte	Result	Qualifier	RL	RL	Unit	Dil	Fac	D	Method	Prep Type
Specific Conductance	190		10		umhos/cm	1			SM 2510B	Total/NA
Total Suspended Solids	210		36		mg/L	1			SM 2540D	Total/NA

### Client Sample ID: LRT0 SW-4

### Lab Sample ID: 720-46087-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Motor Oil Range Organics [C24-C36]	2100		100		ug/L	1			8015B	Total/NA
Aluminum	0.97		0.20		mg/L	1			200.7 Rev 4.4	Total/NA
Copper	0.027		0.020		mg/L	1			200.7 Rev 4.4	Total/NA
Iron	2.7		0.20		mg/L	1			200.7 Rev 4.4	Total/NA
Lead	0.048	^	0.0050		mg/L	1			200.7 Rev 4.4	Total/NA
Vanadium	0.073		0.010		mg/L	1			200.7 Rev 4.4	Total/NA
Zinc	0.22		0.020		mg/L	1			200.7 Rev 4.4	Total/NA
Chemical Oxygen Demand	88		20		mg/L	1			410.4	Total/NA
TOC Dup	5.4		1.0		mg/L	1			SM 5310C	Total/NA
Analyte	Result	Qualifier	RL	RL	Unit	Dil	Fac	D	Method	Prep Type
Specific Conductance	510		10		umhos/cm	1			SM 2510B	Total/NA
Total Suspended Solids	60		13		mg/L	1			SM 2540D	Total/NA

### Client Sample ID: LRT0 SW-5

### Lab Sample ID: 720-46087-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Gasoline Range Organics (GRO)	230		50		ug/L	1			8260B/CA_LUFT	Total/NA
-C5-C12									MS	
Motor Oil Range Organics [C24-C36]	1500		100		ug/L	1			8015B	Total/NA
Aluminum	0.70		0.20		mg/L	1			200.7 Rev 4.4	Total/NA
Copper	0.028		0.020		mg/L	1			200.7 Rev 4.4	Total/NA
Iron	1.8		0.20		mg/L	1			200.7 Rev 4.4	Total/NA
Lead	0.032	^	0.0050		mg/L	1			200.7 Rev 4.4	Total/NA
Zinc	0.17		0.020		mg/L	1			200.7 Rev 4.4	Total/NA
Chemical Oxygen Demand	20		20		mg/L	1			410.4	Total/NA
TOC Dup	7.7		1.0		mg/L	1			SM 5310C	Total/NA
Analyte	Result	Qualifier	RL	RL	Unit	Dil	Fac	D	Method	Prep Type
Specific Conductance	110		10		umhos/cm	1			SM 2510B	Total/NA
Total Suspended Solids	31		10		mg/L	1			SM 2540D	Total/NA

TestAmerica Pleasanton

# Client Sample Results

Client: Environmental Technical Services  
Project/Site: LRT SW ANNUAL

TestAmerica Job ID: 720-46087-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS

Client Sample ID: LRT0 SW-2

Date Collected: 11/17/12 12:00

Date Received: 11/19/12 17:56

Lab Sample ID: 720-46087-1

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.50		ug/L			11/22/12 06:34	1
Benzene	ND		0.50		ug/L			11/22/12 06:34	1
Ethylbenzene	ND		0.50		ug/L			11/22/12 06:34	1
Toluene	ND		0.50		ug/L			11/22/12 06:34	1
Xylenes, Total	ND		1.0		ug/L			11/27/12 00:10	1
Gasoline Range Organics (GRO) -C5-C12	ND		50		ug/L			11/22/12 06:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	102		67 - 130		11/22/12 06:34	1
4-Bromofluorobenzene	95		67 - 130		11/27/12 00:10	1
1,2-Dichloroethane-d4 (Surr)	102		75 - 138		11/22/12 06:34	1
1,2-Dichloroethane-d4 (Surr)	94		75 - 138		11/27/12 00:10	1
Toluene-d8 (Surr)	101		70 - 130		11/22/12 06:34	1
Toluene-d8 (Surr)	98		70 - 130		11/27/12 00:10	1

Client Sample ID: LRT0 SW-4

Date Collected: 11/17/12 13:10

Date Received: 11/19/12 17:56

Lab Sample ID: 720-46087-2

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.50		ug/L			11/22/12 07:03	1
Benzene	ND		0.50		ug/L			11/22/12 07:03	1
Ethylbenzene	ND		0.50		ug/L			11/22/12 07:03	1
Toluene	ND		0.50		ug/L			11/22/12 07:03	1
Xylenes, Total	ND		1.0		ug/L			11/22/12 07:03	1
Gasoline Range Organics (GRO) -C5-C12	ND		50		ug/L			11/22/12 07:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	100		67 - 130		11/22/12 07:03	1
1,2-Dichloroethane-d4 (Surr)	102		75 - 138		11/22/12 07:03	1
Toluene-d8 (Surr)	100		70 - 130		11/22/12 07:03	1

Client Sample ID: LRT0 SW-5

Date Collected: 11/17/12 13:49

Date Received: 11/19/12 17:56

Lab Sample ID: 720-46087-3

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.50		ug/L			11/22/12 07:31	1
Benzene	ND		0.50		ug/L			11/22/12 07:31	1
Ethylbenzene	ND		0.50		ug/L			11/22/12 07:31	1
Toluene	ND		0.50		ug/L			11/22/12 07:31	1
Xylenes, Total	ND		1.0		ug/L			11/22/12 07:31	1
Gasoline Range Organics (GRO) -C5-C12	230		50		ug/L			11/22/12 07:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	100		67 - 130		11/22/12 07:31	1
1,2-Dichloroethane-d4 (Surr)	100		75 - 138		11/22/12 07:31	1
Toluene-d8 (Surr)	101		70 - 130		11/22/12 07:31	1

TestAmerica Pleasanton

# Client Sample Results

Client: Environmental Technical Services  
Project/Site: LRT SW ANNUAL

TestAmerica Job ID: 720-46087-1

## Method: 8015B - Diesel Range Organics (DRO) (GC)

Client Sample ID: LRTO SW-2

Date Collected: 11/17/12 12:00

Date Received: 11/19/12 17:56

Lab Sample ID: 720-46087-1

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Motor Oil Range Organics [C24-C36]	2100		100		ug/L		11/20/12 18:57	11/25/12 10:27	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
p-Terphenyl	58		23 - 156				11/20/12 18:57	11/25/12 10:27	1

Client Sample ID: LRTO SW-4

Date Collected: 11/17/12 13:10

Date Received: 11/19/12 17:56

Lab Sample ID: 720-46087-2

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Motor Oil Range Organics [C24-C36]	2100		100		ug/L		11/20/12 18:57	11/25/12 10:56	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
p-Terphenyl	80		23 - 156				11/20/12 18:57	11/25/12 10:56	1

Client Sample ID: LRTO SW-5

Date Collected: 11/17/12 13:49

Date Received: 11/19/12 17:56

Lab Sample ID: 720-46087-3

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Motor Oil Range Organics [C24-C36]	1500		100		ug/L		11/20/12 18:57	11/25/12 11:25	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
p-Terphenyl	70		23 - 156				11/20/12 18:57	11/25/12 11:25	1

TestAmerica Pleasanton



# Client Sample Results

Client: Environmental Technical Services  
Project/Site: LRT SW ANNUAL

TestAmerica Job ID: 720-46087-1

## Method: 200.7 Rev 4.4 - Metals (ICP)

Client Sample ID: LRTO SW-2

Date Collected: 11/17/12 12:00

Date Received: 11/19/12 17:56

Lab Sample ID: 720-46087-1

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	3.2		0.20		mg/L		11/21/12 10:38	11/23/12 12:22	1
Copper	0.024		0.020		mg/L		11/21/12 10:38	11/23/12 12:22	1
Iron	15		0.20		mg/L		11/21/12 10:38	11/23/12 12:22	1
Lead	0.035	^	0.0050		mg/L		11/21/12 10:38	11/23/12 12:22	1
Vanadium	0.031		0.010		mg/L		11/21/12 10:38	11/23/12 12:22	1
Zinc	0.22		0.020		mg/L		11/21/12 10:38	11/23/12 12:22	1

Client Sample ID: LRTO SW-4

Date Collected: 11/17/12 13:10

Date Received: 11/19/12 17:56

Lab Sample ID: 720-46087-2

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.97		0.20		mg/L		11/21/12 10:38	11/23/12 12:26	1
Copper	0.027		0.020		mg/L		11/21/12 10:38	11/23/12 12:26	1
Iron	2.7		0.20		mg/L		11/21/12 10:38	11/23/12 12:26	1
Lead	0.048	^	0.0050		mg/L		11/21/12 10:38	11/23/12 12:26	1
Vanadium	0.073		0.010		mg/L		11/21/12 10:38	11/23/12 12:26	1
Zinc	0.22		0.020		mg/L		11/21/12 10:38	11/23/12 12:26	1

Client Sample ID: LRTO SW-5

Date Collected: 11/17/12 13:49

Date Received: 11/19/12 17:56

Lab Sample ID: 720-46087-3

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.70		0.20		mg/L		11/21/12 10:38	11/23/12 12:48	1
Copper	0.028		0.020		mg/L		11/21/12 10:38	11/23/12 12:48	1
Iron	1.8		0.20		mg/L		11/21/12 10:38	11/23/12 12:48	1
Lead	0.032	^	0.0050		mg/L		11/21/12 10:38	11/23/12 12:48	1
Vanadium	ND		0.010		mg/L		11/21/12 10:38	11/23/12 12:48	1
Zinc	0.17		0.020		mg/L		11/21/12 10:38	11/23/12 12:48	1

TestAmerica Pleasanton

# Client Sample Results

Client: Environmental Technical Services  
Project/Site: LRT SW ANNUAL

TestAmerica Job ID: 720-46087-1

## General Chemistry

Client Sample ID: LRTO SW-2

Date Collected: 11/17/12 12:00

Date Received: 11/19/12 17:56

Lab Sample ID: 720-46087-1

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM (Oil & Grease)	ND		5.1		mg/L		11/27/12 05:43	11/27/12 08:13	1
Chemical Oxygen Demand	280		20		mg/L			11/28/12 13:30	1
TOC Dup	6.2		1.0		mg/L			11/21/12 15:57	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	190		10		umhos/cm			11/27/12 10:08	1
Total Suspended Solids	210		36		mg/L			11/20/12 20:59	1

Client Sample ID: LRTO SW-4

Date Collected: 11/17/12 13:10

Date Received: 11/19/12 17:56

Lab Sample ID: 720-46087-2

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM (Oil & Grease)	ND		5.0		mg/L		11/27/12 05:49	11/27/12 08:18	1
Chemical Oxygen Demand	88		20		mg/L			11/28/12 13:30	1
TOC Dup	5.4		1.0		mg/L			11/21/12 16:14	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	510		10		umhos/cm			11/27/12 10:09	1
Total Suspended Solids	60		13		mg/L			11/20/12 20:59	1

Client Sample ID: LRTO SW-5

Date Collected: 11/17/12 13:49

Date Received: 11/19/12 17:56

Lab Sample ID: 720-46087-3

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM (Oil & Grease)	ND		5.0		mg/L		11/27/12 05:55	11/27/12 08:23	1
Chemical Oxygen Demand	20		20		mg/L			11/28/12 13:30	1
TOC Dup	7.7		1.0		mg/L			11/21/12 16:30	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	110		10		umhos/cm			11/27/12 10:11	1
Total Suspended Solids	31		10		mg/L			11/21/12 16:49	1

TestAmerica Pleasanton

# QC Sample Results

Client: Environmental Technical Services  
Project/Site: LRT SW ANNUAL

TestAmerica Job ID: 720-46087-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS

Lab Sample ID: MB 720-125707/4

Matrix: Water

Analysis Batch: 125707

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.50		ug/L			11/21/12 21:01	1
Benzene	ND		0.50		ug/L			11/21/12 21:01	1
Ethylbenzene	ND		0.50		ug/L			11/21/12 21:01	1
Toluene	ND		0.50		ug/L			11/21/12 21:01	1
Xylenes, Total	ND		1.0		ug/L			11/21/12 21:01	1
Gasoline Range Organics (GRO)	ND		50		ug/L			11/21/12 21:01	1
-C5-C12									

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	100		67 - 130		11/21/12 21:01	1
1,2-Dichloroethane-d4 (Surr)	100		75 - 138		11/21/12 21:01	1
Toluene-d8 (Surr)	102		70 - 130		11/21/12 21:01	1

Lab Sample ID: LCS 720-125707/5

Matrix: Water

Analysis Batch: 125707

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl tert-butyl ether	25.0	24.9		ug/L		100	62 - 130
Benzene	25.0	23.1		ug/L		92	79 - 130
Ethylbenzene	25.0	24.0		ug/L		96	80 - 120
Toluene	25.0	23.8		ug/L		95	78 - 120
m-Xylene & p-Xylene	50.0	49.8		ug/L		100	70 - 142
o-Xylene	25.0	25.0		ug/L		100	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	102		67 - 130
1,2-Dichloroethane-d4 (Surr)	98		75 - 138
Toluene-d8 (Surr)	104		70 - 130

Lab Sample ID: LCS 720-125707/7

Matrix: Water

Analysis Batch: 125707

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)	500	525		ug/L		105	62 - 120
-C5-C12							

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	103		67 - 130
1,2-Dichloroethane-d4 (Surr)	102		75 - 138
Toluene-d8 (Surr)	103		70 - 130

TestAmerica Pleasanton

# QC Sample Results

Client: Environmental Technical Services  
Project/Site: LRT SW ANNUAL

TestAmerica Job ID: 720-46087-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

Lab Sample ID: LCSD 720-125707/6

Matrix: Water

Analysis Batch: 125707

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methyl tert-butyl ether	25.0	25.2		ug/L		101	62 - 130	1	20
Benzene	25.0	23.5		ug/L		94	79 - 130	2	20
Ethylbenzene	25.0	24.3		ug/L		97	80 - 120	1	20
Toluene	25.0	24.0		ug/L		96	78 - 120	1	20
m-Xylene & p-Xylene	50.0	50.2		ug/L		100	70 - 142	1	20
o-Xylene	25.0	25.4		ug/L		101	70 - 130	1	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	101		67 - 130
1,2-Dichloroethane-d4 (Surr)	99		75 - 138
Toluene-d8 (Surr)	104		70 - 130

Lab Sample ID: LCSD 720-125707/8

Matrix: Water

Analysis Batch: 125707

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)	500	532		ug/L		106	62 - 120	1	20
-C5-C12									

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	105		67 - 130
1,2-Dichloroethane-d4 (Surr)	103		75 - 138
Toluene-d8 (Surr)	104		70 - 130

Lab Sample ID: MB 720-125831/5

Matrix: Water

Analysis Batch: 125831

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.50		ug/L			11/26/12 18:56	1
Benzene	ND		0.50		ug/L			11/26/12 18:56	1
Ethylbenzene	ND		0.50		ug/L			11/26/12 18:56	1
Toluene	ND		0.50		ug/L			11/26/12 18:56	1
Xylenes, Total	ND		1.0		ug/L			11/26/12 18:56	1
Gasoline Range Organics (GRO)	ND		50		ug/L			11/26/12 18:56	1
-C5-C12									

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	93		67 - 130		11/26/12 18:56	1
1,2-Dichloroethane-d4 (Surr)	97		75 - 138		11/26/12 18:56	1
Toluene-d8 (Surr)	97		70 - 130		11/26/12 18:56	1

TestAmerica Pleasanton

# QC Sample Results

Client: Environmental Technical Services  
Project/Site: LRT SW ANNUAL

TestAmerica Job ID: 720-46087-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

Lab Sample ID: LCS 720-125831/6

Matrix: Water

Analysis Batch: 125831

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl tert-butyl ether	25.0	26.8		ug/L		107	62 - 130
Benzene	25.0	24.5		ug/L		98	79 - 130
Ethylbenzene	25.0	23.6		ug/L		94	80 - 120
Toluene	25.0	23.8		ug/L		95	78 - 120
m-Xylene & p-Xylene	50.0	48.8		ug/L		98	70 - 142
o-Xylene	25.0	24.6		ug/L		99	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	99		67 - 130
1,2-Dichloroethane-d4 (Surr)	94		75 - 138
Toluene-d8 (Surr)	102		70 - 130

Lab Sample ID: LCS 720-125831/8

Matrix: Water

Analysis Batch: 125831

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)	500	448		ug/L		90	62 - 120
-C5-C12							

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	100		67 - 130
1,2-Dichloroethane-d4 (Surr)	96		75 - 138
Toluene-d8 (Surr)	102		70 - 130

Lab Sample ID: LCSD 720-125831/7

Matrix: Water

Analysis Batch: 125831

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Methyl tert-butyl ether	25.0	26.6		ug/L		106	62 - 130	1	20
Benzene	25.0	24.5		ug/L		98	79 - 130	0	20
Ethylbenzene	25.0	23.5		ug/L		94	80 - 120	1	20
Toluene	25.0	24.0		ug/L		96	78 - 120	1	20
m-Xylene & p-Xylene	50.0	48.5		ug/L		97	70 - 142	0	20
o-Xylene	25.0	24.4		ug/L		98	70 - 130	1	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	98		67 - 130
1,2-Dichloroethane-d4 (Surr)	92		75 - 138
Toluene-d8 (Surr)	102		70 - 130

TestAmerica Pleasanton

# QC Sample Results

Client: Environmental Technical Services  
Project/Site: LRT SW ANNUAL

TestAmerica Job ID: 720-46087-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

Lab Sample ID: LCSD 720-125831/9

Matrix: Water

Analysis Batch: 125831

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C5-C12	500	436		ug/L		87	62 - 120	3	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
4-Bromofluorobenzene	98		67 - 130						
1,2-Dichloroethane-d4 (Surr)	95		75 - 138						
Toluene-d8 (Surr)	102		70 - 130						

Lab Sample ID: 720-46087-1 MS

Matrix: Water

Analysis Batch: 125831

Client Sample ID: LRTO SW-2

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methyl tert-butyl ether	ND		25.0	27.8		ug/L		111	60 - 138		
Benzene	ND		25.0	25.0		ug/L		100	60 - 140		
Ethylbenzene	ND		25.0	24.5		ug/L		98	60 - 140		
Toluene	ND		25.0	25.5		ug/L		102	60 - 140		
m-Xylene & p-Xylene	ND		50.0	49.9		ug/L		100	60 - 140		
o-Xylene	ND		25.0	26.7		ug/L		107	60 - 140		
Surrogate	MS %Recovery	MS Qualifier	Limits								
4-Bromofluorobenzene	91		67 - 130								
1,2-Dichloroethane-d4 (Surr)	88		75 - 138								
Toluene-d8 (Surr)	101		70 - 130								

Lab Sample ID: 720-46087-1 MSD

Matrix: Water

Analysis Batch: 125831

Client Sample ID: LRTO SW-2

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methyl tert-butyl ether	ND		25.0	26.2		ug/L		105	60 - 138	6	20
Benzene	ND		25.0	24.7		ug/L		99	60 - 140	1	20
Ethylbenzene	ND		25.0	23.2		ug/L		93	60 - 140	6	20
Toluene	ND		25.0	23.8		ug/L		95	60 - 140	7	20
m-Xylene & p-Xylene	ND		50.0	47.5		ug/L		95	60 - 140	5	20
o-Xylene	ND		25.0	24.2		ug/L		97	60 - 140	10	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
4-Bromofluorobenzene	97		67 - 130								
1,2-Dichloroethane-d4 (Surr)	90		75 - 138								
Toluene-d8 (Surr)	103		70 - 130								

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# QC Sample Results

Client: Environmental Technical Services  
Project/Site: LRT SW ANNUAL

TestAmerica Job ID: 720-46087-1

## Method: 8015B - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 720-125549/1-A

Matrix: Water

Analysis Batch: 125780

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 125549

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Motor Oil Range Organics [C24-C36]	ND		99		ug/L		11/20/12 08:44	11/24/12 18:32	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
p-Terphenyl	109		23 - 156				11/20/12 08:44	11/24/12 18:32	1

Lab Sample ID: LCS 720-125549/2-A

Matrix: Water

Analysis Batch: 125542

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 125549

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]	2500	2160		ug/L		86	40 - 150
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
p-Terphenyl	115		23 - 156				

Lab Sample ID: LCSD 720-125549/3-A

Matrix: Water

Analysis Batch: 125542

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 125549

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	2500	2230		ug/L		89	40 - 150	3	35
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
p-Terphenyl	122		23 - 156						

## Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 720-125661/1-A

Matrix: Water

Analysis Batch: 125753

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 125661

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20		mg/L		11/21/12 10:38	11/23/12 11:51	1
Copper	ND		0.020		mg/L		11/21/12 10:38	11/23/12 11:51	1
Iron	ND		0.20		mg/L		11/21/12 10:38	11/23/12 11:51	1
Lead	ND	^	0.0050		mg/L		11/21/12 10:38	11/23/12 11:51	1
Vanadium	ND		0.010		mg/L		11/21/12 10:38	11/23/12 11:51	1
Zinc	ND		0.020		mg/L		11/21/12 10:38	11/23/12 11:51	1

Lab Sample ID: LCS 720-125661/2-A

Matrix: Water

Analysis Batch: 125753

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 125661

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	10.0	10.4		mg/L		104	85 - 115
Copper	1.00	0.994		mg/L		99	85 - 115

TestAmerica Pleasanton

# QC Sample Results

Client: Environmental Technical Services  
Project/Site: LRT SW ANNUAL

TestAmerica Job ID: 720-46087-1

## Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: LCS 720-125661/2-A

Matrix: Water

Analysis Batch: 125753

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 125661

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	10.0	10.7		mg/L		107	85 - 115
Lead	1.00	0.993	^	mg/L		99	85 - 115
Vanadium	1.00	0.970		mg/L		97	85 - 115
Zinc	1.00	0.980		mg/L		98	85 - 115

Lab Sample ID: LCSD 720-125661/3-A

Matrix: Water

Analysis Batch: 125753

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 125661

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Aluminum	10.0	10.5		mg/L		105	85 - 115	1	20
Copper	1.00	0.990		mg/L		99	85 - 115	0	20
Iron	10.0	10.8		mg/L		108	85 - 115	0	20
Lead	1.00	0.999	^	mg/L		100	85 - 115	1	20
Vanadium	1.00	0.970		mg/L		97	85 - 115	0	20
Zinc	1.00	0.985		mg/L		99	85 - 115	1	20

Lab Sample ID: 720-46087-3 MS

Matrix: Water

Analysis Batch: 125753

Client Sample ID: LRT0 SW-5

Prep Type: Total/NA

Prep Batch: 125661

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	0.70		10.0	11.3		mg/L		106	85 - 115
Copper	0.028		1.00	1.02		mg/L		99	85 - 115
Iron	1.8		10.0	12.7		mg/L		108	85 - 115
Lead	0.032	^	1.00	1.02	^	mg/L		98	85 - 115
Vanadium	ND		1.00	0.994		mg/L		98	85 - 115
Zinc	0.17		1.00	1.15		mg/L		99	85 - 115

Lab Sample ID: 720-46087-3 MSD

Matrix: Water

Analysis Batch: 125753

Client Sample ID: LRT0 SW-5

Prep Type: Total/NA

Prep Batch: 125661

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Aluminum	0.70		10.0	11.4		mg/L		107	85 - 115	0	20
Copper	0.028		1.00	1.03		mg/L		100	85 - 115	1	20
Iron	1.8		10.0	12.7		mg/L		109	85 - 115	1	20
Lead	0.032	^	1.00	1.03	^	mg/L		100	85 - 115	1	20
Vanadium	ND		1.00	0.999		mg/L		99	85 - 115	0	20
Zinc	0.17		1.00	1.16		mg/L		100	85 - 115	1	20

## Method: 1664A - HEM and SGT-HEM

Lab Sample ID: MB 500-170918/1-A

Matrix: Water

Analysis Batch: 170922

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 170918

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM (Oil & Grease)	ND		5.0		mg/L		11/27/12 04:15	11/27/12 07:10	1

TestAmerica Pleasanton

# QC Sample Results

Client: Environmental Technical Services  
Project/Site: LRT SW ANNUAL

TestAmerica Job ID: 720-46087-1

## Method: 1664A - HEM and SGT-HEM (Continued)

Lab Sample ID: LCS 500-170918/2-A

Matrix: Water

Analysis Batch: 170922

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 170918

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
HEM (Oil & Grease)	40.0	39.8		mg/L		99	78 - 114

## Method: 410.4 - COD

Lab Sample ID: MB 720-125964/8

Matrix: Water

Analysis Batch: 125964

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		20		mg/L			11/28/12 13:30	1

Lab Sample ID: LCS 720-125964/9

Matrix: Water

Analysis Batch: 125964

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chemical Oxygen Demand	200	196		mg/L		98	90 - 110

Lab Sample ID: 720-46087-1 MS

Matrix: Water

Analysis Batch: 125964

Client Sample ID: LRTO SW-2

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chemical Oxygen Demand	280		200	407	F	mg/L		64	80 - 120

Lab Sample ID: 720-46087-1 MSD

Matrix: Water

Analysis Batch: 125964

Client Sample ID: LRTO SW-2

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chemical Oxygen Demand	280		200	401	F	mg/L		61	80 - 120	1	20

## Method: SM 2510B - Conductivity, Specific Conductance

Lab Sample ID: MB 720-125892/2

Matrix: Water

Analysis Batch: 125892

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	ND		10		umhos/cm			11/27/12 09:56	1

Lab Sample ID: LCS 720-125892/3

Matrix: Water

Analysis Batch: 125892

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Specific Conductance	1000	1000		umhos/cm		100	90 - 110

TestAmerica Pleasanton

# QC Sample Results

Client: Environmental Technical Services  
Project/Site: LRT SW ANNUAL

TestAmerica Job ID: 720-46087-1

## Method: SM 2510B - Conductivity, Specific Conductance (Continued)

Lab Sample ID: LCSD 720-125892/4

Matrix: Water

Analysis Batch: 125892

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Specific Conductance	1000	990		umhos/cm		99	90 - 110	1	20

## Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 720-125633/2

Matrix: Water

Analysis Batch: 125633

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		10		mg/L			11/20/12 20:59	1

Lab Sample ID: LCS 720-125633/1

Matrix: Water

Analysis Batch: 125633

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Suspended Solids	500	423		mg/L		85	69 - 117		

Lab Sample ID: MB 720-125702/2

Matrix: Water

Analysis Batch: 125702

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		10		mg/L			11/21/12 16:49	1

Lab Sample ID: LCS 720-125702/1

Matrix: Water

Analysis Batch: 125702

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Suspended Solids	500	429		mg/L		86	69 - 117		

## Method: SM 5310C - TOC

Lab Sample ID: MB 500-170665/3

Matrix: Water

Analysis Batch: 170665

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
TOC Dup	ND		1.0		mg/L			11/21/12 12:51	1

Lab Sample ID: LCS 500-170665/4

Matrix: Water

Analysis Batch: 170665

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
TOC Result 1	10.0	10.1		mg/L		101	80 - 120		
TOC Result 2	10.0	10.2		mg/L		102	80 - 120		
TOC Dup	10.0	10.1		mg/L		101	80 - 120		

TestAmerica Pleasanton

## QC Association Summary

Client: Environmental Technical Services  
Project/Site: LRT SW ANNUAL

TestAmerica Job ID: 720-46087-1

### GC/MS VOA

#### Analysis Batch: 125707

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-46087-1	LRTO SW-2	Total/NA	Water	8260B/CA_LUFT MS	
720-46087-2	LRTO SW-4	Total/NA	Water	8260B/CA_LUFT MS	
720-46087-3	LRTO SW-5	Total/NA	Water	8260B/CA_LUFT MS	
LCS 720-125707/5	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	
LCS 720-125707/7	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	
LCSD 720-125707/6	Lab Control Sample Dup	Total/NA	Water	8260B/CA_LUFT MS	
LCSD 720-125707/8	Lab Control Sample Dup	Total/NA	Water	8260B/CA_LUFT MS	
MB 720-125707/4	Method Blank	Total/NA	Water	8260B/CA_LUFT MS	

#### Analysis Batch: 125831

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-46087-1	LRTO SW-2	Total/NA	Water	8260B/CA_LUFT MS	
720-46087-1 MS	LRTO SW-2	Total/NA	Water	8260B/CA_LUFT MS	
720-46087-1 MSD	LRTO SW-2	Total/NA	Water	8260B/CA_LUFT MS	
LCS 720-125831/6	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	
LCS 720-125831/8	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	
LCSD 720-125831/7	Lab Control Sample Dup	Total/NA	Water	8260B/CA_LUFT MS	
LCSD 720-125831/9	Lab Control Sample Dup	Total/NA	Water	8260B/CA_LUFT MS	
MB 720-125831/5	Method Blank	Total/NA	Water	8260B/CA_LUFT MS	

### GC Semi VOA

#### Analysis Batch: 125542

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 720-125549/2-A	Lab Control Sample	Total/NA	Water	8015B	125549
LCSD 720-125549/3-A	Lab Control Sample Dup	Total/NA	Water	8015B	125549

#### Prep Batch: 125549

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-46087-1	LRTO SW-2	Total/NA	Water	3510C	
720-46087-2	LRTO SW-4	Total/NA	Water	3510C	
720-46087-3	LRTO SW-5	Total/NA	Water	3510C	
LCS 720-125549/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 720-125549/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
MB 720-125549/1-A	Method Blank	Total/NA	Water	3510C	

TestAmerica Pleasanton

# QC Association Summary

Client: Environmental Technical Services  
Project/Site: LRT SW ANNUAL

TestAmerica Job ID: 720-46087-1

## GC Semi VOA (Continued)

### Analysis Batch: 125780

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-46087-1	LRTO SW-2	Total/NA	Water	8015B	125549
720-46087-2	LRTO SW-4	Total/NA	Water	8015B	125549
720-46087-3	LRTO SW-5	Total/NA	Water	8015B	125549
MB 720-125549/1-A	Method Blank	Total/NA	Water	8015B	125549

## Metals

### Prep Batch: 125661

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-46087-1	LRTO SW-2	Total/NA	Water	200.7	
720-46087-2	LRTO SW-4	Total/NA	Water	200.7	
720-46087-3	LRTO SW-5	Total/NA	Water	200.7	
720-46087-3 MS	LRTO SW-5	Total/NA	Water	200.7	
720-46087-3 MSD	LRTO SW-5	Total/NA	Water	200.7	
LCS 720-125661/2-A	Lab Control Sample	Total/NA	Water	200.7	
LCSD 720-125661/3-A	Lab Control Sample Dup	Total/NA	Water	200.7	
MB 720-125661/1-A	Method Blank	Total/NA	Water	200.7	

### Analysis Batch: 125753

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-46087-1	LRTO SW-2	Total/NA	Water	200.7 Rev 4.4	125661
720-46087-2	LRTO SW-4	Total/NA	Water	200.7 Rev 4.4	125661
720-46087-3	LRTO SW-5	Total/NA	Water	200.7 Rev 4.4	125661
720-46087-3 MS	LRTO SW-5	Total/NA	Water	200.7 Rev 4.4	125661
720-46087-3 MSD	LRTO SW-5	Total/NA	Water	200.7 Rev 4.4	125661
LCS 720-125661/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	125661
LCSD 720-125661/3-A	Lab Control Sample Dup	Total/NA	Water	200.7 Rev 4.4	125661
MB 720-125661/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	125661

## General Chemistry

### Analysis Batch: 125633

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-46087-1	LRTO SW-2	Total/NA	Water	SM 2540D	
720-46087-2	LRTO SW-4	Total/NA	Water	SM 2540D	
LCS 720-125633/1	Lab Control Sample	Total/NA	Water	SM 2540D	
MB 720-125633/2	Method Blank	Total/NA	Water	SM 2540D	

### Analysis Batch: 125702

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-46087-3	LRTO SW-5	Total/NA	Water	SM 2540D	
LCS 720-125702/1	Lab Control Sample	Total/NA	Water	SM 2540D	
MB 720-125702/2	Method Blank	Total/NA	Water	SM 2540D	

### Analysis Batch: 125892

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-46087-1	LRTO SW-2	Total/NA	Water	SM 2510B	
720-46087-2	LRTO SW-4	Total/NA	Water	SM 2510B	
720-46087-3	LRTO SW-5	Total/NA	Water	SM 2510B	
LCS 720-125892/3	Lab Control Sample	Total/NA	Water	SM 2510B	

TestAmerica Pleasanton



# QC Association Summary

Client: Environmental Technical Services  
Project/Site: LRT SW ANNUAL

TestAmerica Job ID: 720-46087-1

## General Chemistry (Continued)

### Analysis Batch: 125892 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 720-125892/4	Lab Control Sample Dup	Total/NA	Water	SM 2510B	
MB 720-125892/2	Method Blank	Total/NA	Water	SM 2510B	

### Analysis Batch: 125964

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-46087-1	LRTO SW-2	Total/NA	Water	410.4	
720-46087-1 MS	LRTO SW-2	Total/NA	Water	410.4	
720-46087-1 MSD	LRTO SW-2	Total/NA	Water	410.4	
720-46087-2	LRTO SW-4	Total/NA	Water	410.4	
720-46087-3	LRTO SW-5	Total/NA	Water	410.4	
LCS 720-125964/9	Lab Control Sample	Total/NA	Water	410.4	
MB 720-125964/8	Method Blank	Total/NA	Water	410.4	

### Analysis Batch: 170665

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-46087-1	LRTO SW-2	Total/NA	Water	SM 5310C	
720-46087-2	LRTO SW-4	Total/NA	Water	SM 5310C	
720-46087-3	LRTO SW-5	Total/NA	Water	SM 5310C	
LCS 500-170665/4	Lab Control Sample	Total/NA	Water	SM 5310C	
MB 500-170665/3	Method Blank	Total/NA	Water	SM 5310C	

### Prep Batch: 170918

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-46087-1	LRTO SW-2	Total/NA	Water	1664A	
720-46087-2	LRTO SW-4	Total/NA	Water	1664A	
720-46087-3	LRTO SW-5	Total/NA	Water	1664A	
LCS 500-170918/2-A	Lab Control Sample	Total/NA	Water	1664A	
MB 500-170918/1-A	Method Blank	Total/NA	Water	1664A	

### Analysis Batch: 170922

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-46087-1	LRTO SW-2	Total/NA	Water	1664A	170918
720-46087-2	LRTO SW-4	Total/NA	Water	1664A	170918
720-46087-3	LRTO SW-5	Total/NA	Water	1664A	170918
LCS 500-170918/2-A	Lab Control Sample	Total/NA	Water	1664A	170918
MB 500-170918/1-A	Method Blank	Total/NA	Water	1664A	170918

TestAmerica Pleasanton

# Lab Chronicle

Client: Environmental Technical Services  
Project/Site: LRT SW ANNUAL

TestAmerica Job ID: 720-46087-1

**Client Sample ID: LRT0 SW-2**

**Date Collected: 11/17/12 12:00**

**Date Received: 11/19/12 17:56**

**Lab Sample ID: 720-46087-1**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		1	125707	11/22/12 06:34	YB	TAL SF
Total/NA	Analysis	8260B/CA_LUFTMS		1	125831	11/27/12 00:10	AC	TAL SF
Total/NA	Prep	3510C			125549	11/20/12 18:57	NP	TAL SF
Total/NA	Analysis	8015B		1	125780	11/25/12 10:27	DH	TAL SF
Total/NA	Prep	200.7			125661	11/21/12 10:38	ET	TAL SF
Total/NA	Analysis	200.7 Rev 4.4		1	125753	11/23/12 12:22	EFH	TAL SF
Total/NA	Analysis	SM 5310C		1	170665	11/21/12 15:57	HMW	TAL CHI
Total/NA	Prep	1664A			170918	11/27/12 05:43	MTB	TAL CHI
Total/NA	Analysis	1664A		1	170922	11/27/12 08:13	MTB	TAL CHI
Total/NA	Analysis	SM 2540D		1	125633	11/20/12 20:59	EYT	TAL SF
Total/NA	Analysis	SM 2510B		1	125892	11/27/12 10:08	MJK	TAL SF
Total/NA	Analysis	410.4		1	125964	11/28/12 13:30	MJK	TAL SF

**Client Sample ID: LRT0 SW-4**

**Date Collected: 11/17/12 13:10**

**Date Received: 11/19/12 17:56**

**Lab Sample ID: 720-46087-2**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		1	125707	11/22/12 07:03	YB	TAL SF
Total/NA	Prep	3510C			125549	11/20/12 18:57	NP	TAL SF
Total/NA	Analysis	8015B		1	125780	11/25/12 10:56	DH	TAL SF
Total/NA	Prep	200.7			125661	11/21/12 10:38	ET	TAL SF
Total/NA	Analysis	200.7 Rev 4.4		1	125753	11/23/12 12:26	EFH	TAL SF
Total/NA	Analysis	SM 5310C		1	170665	11/21/12 16:14	HMW	TAL CHI
Total/NA	Prep	1664A			170918	11/27/12 05:49	MTB	TAL CHI
Total/NA	Analysis	1664A		1	170922	11/27/12 08:18	MTB	TAL CHI
Total/NA	Analysis	SM 2540D		1	125633	11/20/12 20:59	EYT	TAL SF
Total/NA	Analysis	SM 2510B		1	125892	11/27/12 10:09	MJK	TAL SF
Total/NA	Analysis	410.4		1	125964	11/28/12 13:30	MJK	TAL SF

**Client Sample ID: LRT0 SW-5**

**Date Collected: 11/17/12 13:49**

**Date Received: 11/19/12 17:56**

**Lab Sample ID: 720-46087-3**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		1	125707	11/22/12 07:31	YB	TAL SF
Total/NA	Prep	3510C			125549	11/20/12 18:57	NP	TAL SF
Total/NA	Analysis	8015B		1	125780	11/25/12 11:25	DH	TAL SF
Total/NA	Prep	200.7			125661	11/21/12 10:38	ET	TAL SF
Total/NA	Analysis	200.7 Rev 4.4		1	125753	11/23/12 12:48	EFH	TAL SF
Total/NA	Analysis	SM 5310C		1	170665	11/21/12 16:30	HMW	TAL CHI
Total/NA	Prep	1664A			170918	11/27/12 05:55	MTB	TAL CHI

TestAmerica Pleasanton

## Lab Chronicle

Client: Environmental Technical Services  
Project/Site: LRT SW ANNUAL

TestAmerica Job ID: 720-46087-1

**Client Sample ID: LRTO SW-5**

**Lab Sample ID: 720-46087-3**

**Date Collected: 11/17/12 13:49**

**Matrix: Water**

**Date Received: 11/19/12 17:56**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	1664A		1	170922	11/27/12 08:23	MTB	TAL CHI
Total/NA	Analysis	SM 2540D		1	125702	11/21/12 16:49	MJK	TAL SF
Total/NA	Analysis	SM 2510B		1	125892	11/27/12 10:11	MJK	TAL SF
Total/NA	Analysis	410.4		1	125964	11/28/12 13:30	MJK	TAL SF

### Laboratory References:

TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

TAL SF = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

## Certification Summary

Client: Environmental Technical Services  
Project/Site: LRT SW ANNUAL

TestAmerica Job ID: 720-46087-1

### Laboratory: TestAmerica Pleasanton

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	State Program	9	2496	01-31-14

### Laboratory: TestAmerica Chicago

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alabama	State Program	4	40461	04-30-13
California	NELAC	9	01132CA	04-30-13
Georgia	State Program	4	N/A	04-30-13
Georgia	State Program	4	939	04-30-13
Hawaii	State Program	9	N/A	04-30-13
Illinois	NELAC	5	100201	04-30-13
Indiana	State Program	5	C-IL-02	04-30-13
Iowa	State Program	7	82	05-01-14
Kansas	NELAC	7	E-10161	10-31-13
Kentucky	State Program	4	90023	12-31-12
Kentucky (UST)	State Program	4	66	04-11-13
L-A-B	DoD ELAP		L2304	01-06-13
L-A-B	ISO/IEC 17025		L2304	01-06-13
Louisiana	NELAC	6	30720	06-30-13
Massachusetts	State Program	1	M-IL035	06-30-13
Mississippi	State Program	4	N/A	04-30-13
North Carolina DENR	State Program	4	291	12-31-12
North Dakota	State Program	8	R-194	04-30-13
Oklahoma	State Program	6	8908	08-31-13
South Carolina	State Program	4	77001	04-30-13
Texas	NELAC	6	T104704252-09-TX	02-28-13
USDA	Federal		P330-12-00038	02-06-15
Virginia	NELAC	3	460142	06-14-13
Wisconsin	State Program	5	999580010	08-31-13
Wyoming	State Program	8	8TMS-Q	04-30-13

## Method Summary

Client: Environmental Technical Services  
Project/Site: LRT SW ANNUAL

TestAmerica Job ID: 720-46087-1

Method	Method Description	Protocol	Laboratory
8260B/CA_LUFTM S	8260B / CA LUFT MS	SW846	TAL SF
8015B	Diesel Range Organics (DRO) (GC)	SW846	TAL SF
200.7 Rev 4.4	Metals (ICP)	EPA	TAL SF
1664A	HEM and SGT-HEM	1664A	TAL CHI
410.4	COD	MCAWW	TAL SF
SM 2510B	Conductivity, Specific Conductance	SM	TAL SF
SM 2540D	Solids, Total Suspended (TSS)	SM	TAL SF
SM 5310C	TOC	SM	TAL CHI

### Protocol References:

1664A = EPA-821-98-002

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SM = "Standard Methods For The Examination Of Water And Wastewater",

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

### Laboratory References:

TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

TAL SF = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

## Sample Summary

Client: Environmental Technical Services  
Project/Site: LRT SW ANNUAL

TestAmerica Job ID: 720-46087-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
720-46087-1	LRTO SW-2	Water	11/17/12 12:00	11/19/12 17:56
720-46087-2	LRTO SW-4	Water	11/17/12 13:10	11/19/12 17:56
720-46087-3	LRTO SW-5	Water	11/17/12 13:49	11/19/12 17:56



STG  
720-46087

142383

CHAIN OF CUSTODY/ANALYSES REQUESTED				ANNUAL STORMWATER SAMPLES			
Environmental Technical Services				PO. NO. (required) TL 23 206			
1548 Jacob Avenue				Project Name: LRT SW ANNUAL			
San Jose, California 95118				11/7/12			
				<b>MUST ANALYZE USING 40 CFR 136 METHODS</b>			

CLIENT ID	CHK BY SYSTEMS TO BE ANALYZED	DATE	TIME	LAB ID NO	TSS	SPEC COND	TPHG BTX MTBE 8260	TOG 1664	COD	TTL METALS AL, CU, FE, PB, ZN, VN	8081	TOC	TEPH MO
SW-1													
SW-2	X	11-17-12	1200		X	X	X	X	X	X	X	X	X
SW-3													
SW-4	X	11-17-12	1310		X	X	X	X	X	X	X	X	X
SW-5	X	11-17-12	1349		X	X	X	X	X	X	X	X	X
SW-6													
SW-7													
S PARR SW-10													
S PARR SW-11													
N PARR SW-12													
Sampled/Released By: <u>RA. Lester</u> Print: <u>RA. Lester</u> Sign: <u>RA. Lester</u> Date: <u>11/17/2012</u> Time: <u>1610</u>													
Released By: <u>Tom Lester</u> Print: <u>Tom Lester</u> Sign: <u>Tom Lester</u> Date: <u>11-19-12</u> Time: <u>16:59</u>													
Released By: <u>Helen Machuga</u> Print: <u>Helen Machuga</u> Sign: <u>Helen Machuga</u> Date: <u>11-19-12</u> Time: <u>17:56</u>													
Released To: <u>Tom Lester</u> Print: <u>Tom Lester</u> Sign: <u>Tom Lester</u> Date: <u>11-17-12</u> Time: <u>16:00</u>													
Released To: <u>Helen Machuga</u> Print: <u>Helen Machuga</u> Sign: <u>Helen Machuga</u> Date: <u>11-19-12</u> Time: <u>16:59</u>													
Released To: <u>Tom Lester</u> Print: <u>Tom Lester</u> Sign: <u>Tom Lester</u> Date: <u>11-19-12</u> Time: <u>17:56</u>													

Notes: Please analyze all Systems checked for all analyses listed. NS=Not Sampled (system wasn't discharging)

4.0°C

## Login Sample Receipt Checklist

Client: Environmental Technical Services

Job Number: 720-46087-1

Login Number: 46087

List Source: TestAmerica Pleasanton

List Number: 1

Creator: Bullock, Tracy

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	False	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

## Login Sample Receipt Checklist

Client: Environmental Technical Services

Job Number: 720-46087-1

**Login Number: 46087**

**List Source: TestAmerica Chicago**

**List Number: 1**

**List Creation: 11/21/12 12:07 PM**

**Creator: Kelsey, Shawn M**

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	True	

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Pleasanton

1220 Quarry Lane

Pleasanton, CA 94566

Tel: (925)484-1919

TestAmerica Job ID: 720-46087-2

Client Project/Site: LRT SW ANNUAL

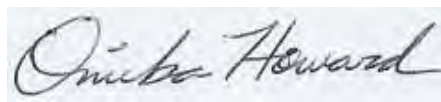
For:

Environmental Technical Services

1548 Jacob Avenue

San Jose, California 95118

Attn: Helen Mawhinney



Authorized for release by:

11/29/2012 11:10:44 AM

Onieka Howard

Project Manager I

[onieka.howard@testamericainc.com](mailto:onieka.howard@testamericainc.com)

### LINKS

Review your project  
results through

**TotalAccess**

Have a Question?



Visit us at:

[www.testamericainc.com](http://www.testamericainc.com)

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*

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## Definitions/Glossary

Client: Environmental Technical Services  
Project/Site: LRT SW ANNUAL

TestAmerica Job ID: 720-46087-2

### Qualifiers

#### GC Semi VOA

Qualifier	Qualifier Description
p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.

### Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDA	Minimum detectable activity
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)



## Case Narrative

Client: Environmental Technical Services  
Project/Site: LRT SW ANNUAL

TestAmerica Job ID: 720-46087-2

**Job ID: 720-46087-2**

**Laboratory: TestAmerica Pleasanton**

### Narrative

#### Job Narrative 720-46087-2

#### Comments

No additional comments.

#### Receipt

The samples were received on 11/19/2012 5:56 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.0° C.

Except:

The following samples were collected in improper containers for COD: LRTO SW-2, LRTO SW-4, and LRTO SW-5. Received only 2-40ml H2SO4 amber vials for TOC, after receipt the lab acidified 1-poly 250ml with Sulfuric Acid for COD.

#### GC Semi VOA

No analytical or quality issues were noted.

#### Organic Prep

No analytical or quality issues were noted.

## Detection Summary

Client: Environmental Technical Services  
Project/Site: LRT SW ANNUAL

TestAmerica Job ID: 720-46087-2

**Client Sample ID: LRT0 SW-2**

**Lab Sample ID: 720-46087-1**

No Detections

**Client Sample ID: LRT0 SW-4**

**Lab Sample ID: 720-46087-2**

No Detections

**Client Sample ID: LRT0 SW-5**

**Lab Sample ID: 720-46087-3**

No Detections

1

2

3

4

5

6

7

8

9

10

11

12

13

14

# Client Sample Results

Client: Environmental Technical Services  
Project/Site: LRT SW ANNUAL

TestAmerica Job ID: 720-46087-2

## Method: 8081A - Organochlorine Pesticides (GC)

Client Sample ID: LRT0 SW-2

Date Collected: 11/17/12 12:00

Date Received: 11/19/12 17:56

Lab Sample ID: 720-46087-1

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		0.060		ug/L		11/21/12 14:01	11/28/12 02:20	1
Dieldrin	ND		0.060		ug/L		11/21/12 14:01	11/28/12 02:20	1
Endrin aldehyde	ND		0.060		ug/L		11/21/12 14:01	11/28/12 02:20	1
Endrin	ND		0.060		ug/L		11/21/12 14:01	11/28/12 02:20	1
Endrin ketone	ND		0.060		ug/L		11/21/12 14:01	11/28/12 02:20	1
Heptachlor	ND		0.060		ug/L		11/21/12 14:01	11/28/12 02:20	1
Heptachlor epoxide	ND		0.060		ug/L		11/21/12 14:01	11/28/12 02:20	1
4,4'-DDT	ND		0.060		ug/L		11/21/12 14:01	11/28/12 02:20	1
4,4'-DDE	ND		0.060		ug/L		11/21/12 14:01	11/28/12 02:20	1
4,4'-DDD	ND		0.060		ug/L		11/21/12 14:01	11/28/12 02:20	1
Endosulfan I	ND		0.060		ug/L		11/21/12 14:01	11/28/12 02:20	1
Endosulfan II	ND		0.060		ug/L		11/21/12 14:01	11/28/12 02:20	1
alpha-BHC	ND		0.060		ug/L		11/21/12 14:01	11/28/12 02:20	1
beta-BHC	ND		0.060		ug/L		11/21/12 14:01	11/28/12 02:20	1
gamma-BHC (Lindane)	ND		0.060		ug/L		11/21/12 14:01	11/28/12 02:20	1
delta-BHC	ND		0.060		ug/L		11/21/12 14:01	11/28/12 02:20	1
Endosulfan sulfate	ND		0.060		ug/L		11/21/12 14:01	11/28/12 02:20	1
Methoxychlor	ND		0.060		ug/L		11/21/12 14:01	11/28/12 02:20	1
Toxaphene	ND		1.0		ug/L		11/21/12 14:01	11/28/12 02:20	1
Chlordane (technical)	ND		1.0		ug/L		11/21/12 14:01	11/28/12 02:20	1
alpha-Chlordane	ND		0.060		ug/L		11/21/12 14:01	11/28/12 02:20	1
gamma-Chlordane	ND		0.060		ug/L		11/21/12 14:01	11/28/12 02:20	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	48	p	36 - 112				11/21/12 14:01	11/28/12 02:20	1
DCB Decachlorobiphenyl	31		14 - 103				11/21/12 14:01	11/28/12 02:20	1

Client Sample ID: LRT0 SW-4

Date Collected: 11/17/12 13:10

Date Received: 11/19/12 17:56

Lab Sample ID: 720-46087-2

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		0.061		ug/L		11/21/12 14:01	11/28/12 02:38	1
Dieldrin	ND		0.061		ug/L		11/21/12 14:01	11/28/12 02:38	1
Endrin aldehyde	ND		0.061		ug/L		11/21/12 14:01	11/28/12 02:38	1
Endrin	ND		0.061		ug/L		11/21/12 14:01	11/28/12 02:38	1
Endrin ketone	ND		0.061		ug/L		11/21/12 14:01	11/28/12 02:38	1
Heptachlor	ND		0.061		ug/L		11/21/12 14:01	11/28/12 02:38	1
Heptachlor epoxide	ND		0.061		ug/L		11/21/12 14:01	11/28/12 02:38	1
4,4'-DDT	ND		0.061		ug/L		11/21/12 14:01	11/28/12 02:38	1
4,4'-DDE	ND		0.061		ug/L		11/21/12 14:01	11/28/12 02:38	1
4,4'-DDD	ND		0.061		ug/L		11/21/12 14:01	11/28/12 02:38	1
Endosulfan I	ND		0.061		ug/L		11/21/12 14:01	11/28/12 02:38	1
Endosulfan II	ND		0.061		ug/L		11/21/12 14:01	11/28/12 02:38	1
alpha-BHC	ND		0.061		ug/L		11/21/12 14:01	11/28/12 02:38	1
beta-BHC	ND		0.061		ug/L		11/21/12 14:01	11/28/12 02:38	1
gamma-BHC (Lindane)	ND		0.061		ug/L		11/21/12 14:01	11/28/12 02:38	1
delta-BHC	ND		0.061		ug/L		11/21/12 14:01	11/28/12 02:38	1
Endosulfan sulfate	ND		0.061		ug/L		11/21/12 14:01	11/28/12 02:38	1
Methoxychlor	ND		0.061		ug/L		11/21/12 14:01	11/28/12 02:38	1
Toxaphene	ND		1.0		ug/L		11/21/12 14:01	11/28/12 02:38	1

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# Client Sample Results

Client: Environmental Technical Services  
Project/Site: LRT SW ANNUAL

TestAmerica Job ID: 720-46087-2

## Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Client Sample ID: LRT0 SW-4

Date Collected: 11/17/12 13:10

Date Received: 11/19/12 17:56

Lab Sample ID: 720-46087-2

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlordane (technical)	ND		1.0		ug/L		11/21/12 14:01	11/28/12 02:38	1
alpha-Chlordane	ND		0.061		ug/L		11/21/12 14:01	11/28/12 02:38	1
gamma-Chlordane	ND		0.061		ug/L		11/21/12 14:01	11/28/12 02:38	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	64		36 - 112				11/21/12 14:01	11/28/12 02:38	1
DCB Decachlorobiphenyl	46		14 - 103				11/21/12 14:01	11/28/12 02:38	1

Client Sample ID: LRT0 SW-5

Date Collected: 11/17/12 13:49

Date Received: 11/19/12 17:56

Lab Sample ID: 720-46087-3

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		0.061		ug/L		11/21/12 14:01	11/28/12 02:56	1
Dieldrin	ND		0.061		ug/L		11/21/12 14:01	11/28/12 02:56	1
Endrin aldehyde	ND		0.061		ug/L		11/21/12 14:01	11/28/12 02:56	1
Endrin	ND		0.061		ug/L		11/21/12 14:01	11/28/12 02:56	1
Endrin ketone	ND		0.061		ug/L		11/21/12 14:01	11/28/12 02:56	1
Heptachlor	ND		0.061		ug/L		11/21/12 14:01	11/28/12 02:56	1
Heptachlor epoxide	ND		0.061		ug/L		11/21/12 14:01	11/28/12 02:56	1
4,4'-DDT	ND		0.061		ug/L		11/21/12 14:01	11/28/12 02:56	1
4,4'-DDE	ND		0.061		ug/L		11/21/12 14:01	11/28/12 02:56	1
4,4'-DDD	ND		0.061		ug/L		11/21/12 14:01	11/28/12 02:56	1
Endosulfan I	ND		0.061		ug/L		11/21/12 14:01	11/28/12 02:56	1
Endosulfan II	ND		0.061		ug/L		11/21/12 14:01	11/28/12 02:56	1
alpha-BHC	ND		0.061		ug/L		11/21/12 14:01	11/28/12 02:56	1
beta-BHC	ND		0.061		ug/L		11/21/12 14:01	11/28/12 02:56	1
gamma-BHC (Lindane)	ND		0.061		ug/L		11/21/12 14:01	11/28/12 02:56	1
delta-BHC	ND		0.061		ug/L		11/21/12 14:01	11/28/12 02:56	1
Endosulfan sulfate	ND		0.061		ug/L		11/21/12 14:01	11/28/12 02:56	1
Methoxychlor	ND		0.061		ug/L		11/21/12 14:01	11/28/12 02:56	1
Toxaphene	ND		1.0		ug/L		11/21/12 14:01	11/28/12 02:56	1
Chlordane (technical)	ND		1.0		ug/L		11/21/12 14:01	11/28/12 02:56	1
alpha-Chlordane	ND		0.061		ug/L		11/21/12 14:01	11/28/12 02:56	1
gamma-Chlordane	ND		0.061		ug/L		11/21/12 14:01	11/28/12 02:56	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	55		36 - 112				11/21/12 14:01	11/28/12 02:56	1
DCB Decachlorobiphenyl	24		14 - 103				11/21/12 14:01	11/28/12 02:56	1

TestAmerica Pleasanton

# QC Sample Results

Client: Environmental Technical Services  
Project/Site: LRT SW ANNUAL

TestAmerica Job ID: 720-46087-2

## Method: 8081A - Organochlorine Pesticides (GC)

Lab Sample ID: MB 720-125683/1-A

Matrix: Water

Analysis Batch: 125905

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 125683

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		0.060		ug/L		11/21/12 14:01	11/27/12 21:12	1
Dieldrin	ND		0.060		ug/L		11/21/12 14:01	11/27/12 21:12	1
Endrin aldehyde	ND		0.060		ug/L		11/21/12 14:01	11/27/12 21:12	1
Endrin	ND		0.060		ug/L		11/21/12 14:01	11/27/12 21:12	1
Endrin ketone	ND		0.060		ug/L		11/21/12 14:01	11/27/12 21:12	1
Heptachlor	ND		0.060		ug/L		11/21/12 14:01	11/27/12 21:12	1
Heptachlor epoxide	ND		0.060		ug/L		11/21/12 14:01	11/27/12 21:12	1
4,4'-DDT	ND		0.060		ug/L		11/21/12 14:01	11/27/12 21:12	1
4,4'-DDE	ND		0.060		ug/L		11/21/12 14:01	11/27/12 21:12	1
4,4'-DDD	ND		0.060		ug/L		11/21/12 14:01	11/27/12 21:12	1
Endosulfan I	ND		0.060		ug/L		11/21/12 14:01	11/27/12 21:12	1
Endosulfan II	ND		0.060		ug/L		11/21/12 14:01	11/27/12 21:12	1
alpha-BHC	ND		0.060		ug/L		11/21/12 14:01	11/27/12 21:12	1
beta-BHC	ND		0.060		ug/L		11/21/12 14:01	11/27/12 21:12	1
gamma-BHC (Lindane)	ND		0.060		ug/L		11/21/12 14:01	11/27/12 21:12	1
delta-BHC	ND		0.060		ug/L		11/21/12 14:01	11/27/12 21:12	1
Endosulfan sulfate	ND		0.060		ug/L		11/21/12 14:01	11/27/12 21:12	1
Methoxychlor	ND		0.060		ug/L		11/21/12 14:01	11/27/12 21:12	1
Toxaphene	ND		1.0		ug/L		11/21/12 14:01	11/27/12 21:12	1
Chlordane (technical)	ND		1.0		ug/L		11/21/12 14:01	11/27/12 21:12	1
alpha-Chlordane	ND		0.060		ug/L		11/21/12 14:01	11/27/12 21:12	1
gamma-Chlordane	ND		0.060		ug/L		11/21/12 14:01	11/27/12 21:12	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	74		36 - 112	11/21/12 14:01	11/27/12 21:12	1
DCB Decachlorobiphenyl	28		14 - 103	11/21/12 14:01	11/27/12 21:12	1

Lab Sample ID: LCS 720-125683/2-A

Matrix: Water

Analysis Batch: 125905

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 125683

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aldrin	0.500	0.355		ug/L		71	44 - 120
Dieldrin	0.500	0.439		ug/L		88	43 - 120
Endrin	0.500	0.435		ug/L		87	15 - 138
Heptachlor	0.500	0.376		ug/L		75	17 - 128
4,4'-DDT	0.500	0.438		ug/L		88	46 - 120
gamma-BHC (Lindane)	0.500	0.432		ug/L		86	46 - 121

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Tetrachloro-m-xylene	74		36 - 112
DCB Decachlorobiphenyl	32		14 - 103

TestAmerica Pleasanton

# QC Sample Results

Client: Environmental Technical Services  
Project/Site: LRT SW ANNUAL

TestAmerica Job ID: 720-46087-2

## Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCSD 720-125683/3-A

Matrix: Water

Analysis Batch: 125905

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 125683

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aldrin	0.500	0.346		ug/L		69	44 - 120	3	20
Dieldrin	0.500	0.436		ug/L		87	43 - 120	1	20
Endrin	0.500	0.432		ug/L		86	15 - 138	1	20
Heptachlor	0.500	0.370		ug/L		74	17 - 128	2	20
4,4'-DDT	0.500	0.433		ug/L		87	46 - 120	1	20
gamma-BHC (Lindane)	0.500	0.427		ug/L		85	46 - 121	1	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Tetrachloro-m-xylene	72		36 - 112
DCB Decachlorobiphenyl	28		14 - 103

TestAmerica Pleasanton



## QC Association Summary

Client: Environmental Technical Services  
Project/Site: LRT SW ANNUAL

TestAmerica Job ID: 720-46087-2

### GC Semi VOA

#### Prep Batch: 125683

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-46087-1	LRT0 SW-2	Total/NA	Water	3510C	
720-46087-2	LRT0 SW-4	Total/NA	Water	3510C	
720-46087-3	LRT0 SW-5	Total/NA	Water	3510C	
LCS 720-125683/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 720-125683/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
MB 720-125683/1-A	Method Blank	Total/NA	Water	3510C	

#### Analysis Batch: 125905

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-46087-1	LRT0 SW-2	Total/NA	Water	8081A	125683
720-46087-2	LRT0 SW-4	Total/NA	Water	8081A	125683
720-46087-3	LRT0 SW-5	Total/NA	Water	8081A	125683
LCS 720-125683/2-A	Lab Control Sample	Total/NA	Water	8081A	125683
LCSD 720-125683/3-A	Lab Control Sample Dup	Total/NA	Water	8081A	125683
MB 720-125683/1-A	Method Blank	Total/NA	Water	8081A	125683

## Lab Chronicle

Client: Environmental Technical Services  
Project/Site: LRT SW ANNUAL

TestAmerica Job ID: 720-46087-2

### Client Sample ID: LRTO SW-2

Date Collected: 11/17/12 12:00

Date Received: 11/19/12 17:56

### Lab Sample ID: 720-46087-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			125683	11/21/12 14:01	RU	TAL SF
Total/NA	Analysis	8081A		1	125905	11/28/12 02:20	RB	TAL SF

### Client Sample ID: LRTO SW-4

Date Collected: 11/17/12 13:10

Date Received: 11/19/12 17:56

### Lab Sample ID: 720-46087-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			125683	11/21/12 14:01	RU	TAL SF
Total/NA	Analysis	8081A		1	125905	11/28/12 02:38	RB	TAL SF

### Client Sample ID: LRTO SW-5

Date Collected: 11/17/12 13:49

Date Received: 11/19/12 17:56

### Lab Sample ID: 720-46087-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			125683	11/21/12 14:01	RU	TAL SF
Total/NA	Analysis	8081A		1	125905	11/28/12 02:56	RB	TAL SF

#### Laboratory References:

TAL SF = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

## Certification Summary

Client: Environmental Technical Services  
Project/Site: LRT SW ANNUAL

TestAmerica Job ID: 720-46087-2

### Laboratory: TestAmerica Pleasanton

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	State Program	9	2496	01-31-14

## Method Summary

Client: Environmental Technical Services  
Project/Site: LRT SW ANNUAL

TestAmerica Job ID: 720-46087-2

Method	Method Description	Protocol	Laboratory
8081A	Organochlorine Pesticides (GC)	SW846	TAL SF

**Protocol References:**

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

**Laboratory References:**

TAL SF = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

## Sample Summary

Client: Environmental Technical Services  
Project/Site: LRT SW ANNUAL

TestAmerica Job ID: 720-46087-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
720-46087-1	LRTO SW-2	Water	11/17/12 12:00	11/19/12 17:56
720-46087-2	LRTO SW-4	Water	11/17/12 13:10	11/19/12 17:56
720-46087-3	LRTO SW-5	Water	11/17/12 13:49	11/19/12 17:56

STG  
720-46087

142383

CHAIN OF CUSTODY/ANALYSES REQUESTED				ANNUAL STORMWATER SAMPLES			
Environmental Technical Services				PO. NO. (required) TL 23 206			
1548 Jacob Avenue				Project Name: LRT SW ANNUAL			
San Jose, California 95118				11/7/12			
				<b>MUST ANALYZE USING 40 CFR 136 METHODS</b>			

CLIENT ID	CHK BY SYSTEMS TO BE ANALYZED	DATE	TIME	LAB ID NO	TSS	SPEC COND	TPHG BTX MTBE 8260	TOG 1664	COD	TTLIC METALS AL, CU, FE, PB, ZN, VN	8081	TOC	TEPH MO
SW-1													
SW-2	X	11-17-12	1200		X	X	X	X	X	X	X	X	X
SW-3													
SW-4	X	11-17-12	1310		X	X	X	X	X	X	X	X	X
SW-5	X	11-17-12	1349		X	X	X	X	X	X	X	X	X
SW-6													
SW-7													
S PARR SW-10													
S PARR SW-11													
N PARR SW-12													
Sampled/Released By: R.A. Lester													
Print: R.A. Lester													
Sign: R.A. Lester													
Date: 11/17/2012													
Time: 16:00													
Released By: Tony Lester													
Print: Tony Lester													
Sign: Tony Lester													
Date: 11-19-12													
Time: 16:59													
Released By: Helen Machuga													
Print: Helen Machuga													
Sign: Helen Machuga													
Date: 11-19-12													
Time: 17:56													
Notes: Please analyze all Systems checked for all analyses listed. NS=Not Sampled (system wasn't discharging)													

4.0°C



## Login Sample Receipt Checklist

Client: Environmental Technical Services

Job Number: 720-46087-2

Login Number: 46087

List Source: TestAmerica Pleasanton

List Number: 1

Creator: Bullock, Tracy

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	False	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Pleasanton

1220 Quarry Lane

Pleasanton, CA 94566

Tel: (925)484-1919

TestAmerica Job ID: 720-46158-1

Client Project/Site: LRT SW ANNUAL

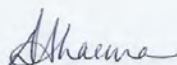
For:

Environmental Technical Services

1548 Jacob Avenue

San Jose, California 95118

Attn: Helen Mawhinney



Authorized for release by:

12/5/2012 4:54:45 PM

Dimple Sharma

Project Manager I

[dimple.sharma@testamericainc.com](mailto:dimple.sharma@testamericainc.com)

Designee for

Onieka Howard

Project Manager I

[onieka.howard@testamericainc.com](mailto:onieka.howard@testamericainc.com)

### LINKS

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*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*

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## Definitions/Glossary

Client: Environmental Technical Services  
Project/Site: LRT SW ANNUAL

TestAmerica Job ID: 720-46158-1

### Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDA	Minimum detectable activity
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

## Case Narrative

Client: Environmental Technical Services  
Project/Site: LRT SW ANNUAL

TestAmerica Job ID: 720-46158-1

**Job ID: 720-46158-1**

**Laboratory: TestAmerica Pleasanton**

### Narrative

#### Job Narrative 720-46158-1

#### Comments

No additional comments.

#### Receipt

The samples were received on 11/21/2012 1:24 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 5.8° C and 7.0° C.

Except:

All four samples were collected in improper containers for COD. Received only 2-40ml H2SO4 amber vials for TOC, after receipt the lab acidified 1- poly unpreserved 250ml with H2SO4 for COD.

NOTE: Received two unpreserved amber 1L's for SW-5 @ 08:50, this sample has a DUP amber 1L unpreserved. The other three samples have a total of 12 containers, SW-5 has 13 containers.

Sample LRT0 S PARR SW-11 2 of 4 voa vials have headspace.

The container label for the following sample(s) did not match the information listed on the Chain-of-Custody (COC): All the sample container labels list McCampbell label LRT0 prior to the COC ID, one container is the exception listed below. The COC lists SW-2, SW-5, S PARR SW-10, N PARR SW-12. Per prior request from the client 11/19/12 use LRT0 prior to Client ID. One amber 1L ESS label: SW-5 11-21-12 08:50 does not have LRT0 listed with the CLIENT ID. The 1L is being held (#02M).

Sample(s) were received at the laboratory outside the required temperature criteria: client noted on the COC " OK to analyze out of temp."

#### GC/MS VOA

No analytical or quality issues were noted.

#### GC Semi VOA

No analytical or quality issues were noted.

#### Metals

No analytical or quality issues were noted.

#### General Chemistry

No analytical or quality issues were noted.

#### Organic Prep

No analytical or quality issues were noted.

## Detection Summary

Client: Environmental Technical Services  
Project/Site: LRT SW ANNUAL

TestAmerica Job ID: 720-46158-1

### Client Sample ID: LRT0 SW-2

### Lab Sample ID: 720-46158-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Motor Oil Range Organics [C24-C36]	380		100		ug/L	1		8015B	Total/NA
Lead	0.013		0.0050		mg/L	1		200.7 Rev 4.4	Total/NA
Vanadium	0.014		0.010		mg/L	1		200.7 Rev 4.4	Total/NA
Zinc	0.12		0.020		mg/L	1		200.7 Rev 4.4	Total/NA
Iron	9.7		0.20		mg/L	1		200.7 Rev 4.4	Total/NA
Aluminum	0.90		0.20		mg/L	1		200.7 Rev 4.4	Total/NA
Chemical Oxygen Demand	130		20		mg/L	1		410.4	Total/NA
TOC Dup	1.5		1.0		mg/L	1		SM 5310C	Total/NA
Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Specific Conductance	140		10		umhos/cm	1		SM 2510B	Total/NA
Total Suspended Solids	290		32		mg/L	1		SM 2540D	Total/NA

### Client Sample ID: LRT0 SW-5

### Lab Sample ID: 720-46158-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Motor Oil Range Organics [C24-C36]	670		100		ug/L	1		8015B	Total/NA
Lead	0.015		0.0050		mg/L	1		200.7 Rev 4.4	Total/NA
Zinc	0.085		0.020		mg/L	1		200.7 Rev 4.4	Total/NA
Iron	1.4		0.20		mg/L	1		200.7 Rev 4.4	Total/NA
Aluminum	0.57		0.20		mg/L	1		200.7 Rev 4.4	Total/NA
TOC Dup	2.5		1.0		mg/L	1		SM 5310C	Total/NA
Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Specific Conductance	68		10		umhos/cm	1		SM 2510B	Total/NA
Total Suspended Solids	11		10		mg/L	1		SM 2540D	Total/NA

### Client Sample ID: LRT0 S PARR SW-11

### Lab Sample ID: 720-46158-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Motor Oil Range Organics [C24-C36]	190		100		ug/L	1		8015B	Total/NA
Vanadium	0.040		0.010		mg/L	1		200.7 Rev 4.4	Total/NA
TOC Dup	1.5		1.0		mg/L	1		SM 5310C	Total/NA
Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Specific Conductance	97		10		umhos/cm	1		SM 2510B	Total/NA

### Client Sample ID: LRT0 N PARR SW-12

### Lab Sample ID: 720-46158-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Motor Oil Range Organics [C24-C36]	860		100		ug/L	1		8015B	Total/NA
Lead	0.014		0.0050		mg/L	1		200.7 Rev 4.4	Total/NA
Vanadium	0.022		0.010		mg/L	1		200.7 Rev 4.4	Total/NA
Zinc	0.082		0.020		mg/L	1		200.7 Rev 4.4	Total/NA
Iron	4.8		0.20		mg/L	1		200.7 Rev 4.4	Total/NA
Aluminum	4.1		0.20		mg/L	1		200.7 Rev 4.4	Total/NA
Chemical Oxygen Demand	43		20		mg/L	1		410.4	Total/NA
TOC Dup	7.7		1.0		mg/L	1		SM 5310C	Total/NA
Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Specific Conductance	150		10		umhos/cm	1		SM 2510B	Total/NA
Total Suspended Solids	57		10		mg/L	1		SM 2540D	Total/NA

TestAmerica Pleasanton



# Client Sample Results

Client: Environmental Technical Services  
Project/Site: LRT SW ANNUAL

TestAmerica Job ID: 720-46158-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS

Client Sample ID: LRT0 SW-2

Date Collected: 11/21/12 09:00

Date Received: 11/21/12 13:24

Lab Sample ID: 720-46158-1

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.50		ug/L			11/26/12 11:56	1
Benzene	ND		0.50		ug/L			11/26/12 11:56	1
Ethylbenzene	ND		0.50		ug/L			11/26/12 11:56	1
Toluene	ND		0.50		ug/L			11/26/12 11:56	1
Xylenes, Total	ND		1.0		ug/L			11/26/12 11:56	1
Gasoline Range Organics (GRO) -C5-C12	ND		50		ug/L			11/26/12 11:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	101		67 - 130		11/26/12 11:56	1
1,2-Dichloroethane-d4 (Surr)	108		75 - 138		11/26/12 11:56	1
Toluene-d8 (Surr)	96		70 - 130		11/26/12 11:56	1

Client Sample ID: LRT0 SW-5

Date Collected: 11/21/12 08:50

Date Received: 11/21/12 13:24

Lab Sample ID: 720-46158-2

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.50		ug/L			11/26/12 12:28	1
Benzene	ND		0.50		ug/L			11/26/12 12:28	1
Ethylbenzene	ND		0.50		ug/L			11/26/12 12:28	1
Toluene	ND		0.50		ug/L			11/26/12 12:28	1
Xylenes, Total	ND		1.0		ug/L			11/26/12 12:28	1
Gasoline Range Organics (GRO) -C5-C12	ND		50		ug/L			11/26/12 12:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	99		67 - 130		11/26/12 12:28	1
1,2-Dichloroethane-d4 (Surr)	110		75 - 138		11/26/12 12:28	1
Toluene-d8 (Surr)	97		70 - 130		11/26/12 12:28	1

Client Sample ID: LRT0 S PARR SW-11

Date Collected: 11/21/12 07:31

Date Received: 11/21/12 13:24

Lab Sample ID: 720-46158-3

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.50		ug/L			11/26/12 12:59	1
Benzene	ND		0.50		ug/L			11/26/12 12:59	1
Ethylbenzene	ND		0.50		ug/L			11/26/12 12:59	1
Toluene	ND		0.50		ug/L			11/26/12 12:59	1
Xylenes, Total	ND		1.0		ug/L			11/26/12 12:59	1
Gasoline Range Organics (GRO) -C5-C12	ND		50		ug/L			11/26/12 12:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	100		67 - 130		11/26/12 12:59	1
1,2-Dichloroethane-d4 (Surr)	109		75 - 138		11/26/12 12:59	1
Toluene-d8 (Surr)	97		70 - 130		11/26/12 12:59	1

TestAmerica Pleasanton

# Client Sample Results

Client: Environmental Technical Services  
Project/Site: LRT SW ANNUAL

TestAmerica Job ID: 720-46158-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS

Client Sample ID: LRTO N PARR SW-12

Lab Sample ID: 720-46158-4

Date Collected: 11/21/12 07:59

Matrix: Water

Date Received: 11/21/12 13:24

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.50		ug/L			11/26/12 13:31	1
Benzene	ND		0.50		ug/L			11/26/12 13:31	1
Ethylbenzene	ND		0.50		ug/L			11/26/12 13:31	1
Toluene	ND		0.50		ug/L			11/26/12 13:31	1
Xylenes, Total	ND		1.0		ug/L			11/26/12 13:31	1
Gasoline Range Organics (GRO) -C5-C12	ND		50		ug/L			11/26/12 13:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	100		67 - 130		11/26/12 13:31	1
1,2-Dichloroethane-d4 (Surr)	117		75 - 138		11/26/12 13:31	1
Toluene-d8 (Surr)	96		70 - 130		11/26/12 13:31	1

# Client Sample Results

Client: Environmental Technical Services  
Project/Site: LRT SW ANNUAL

TestAmerica Job ID: 720-46158-1

## Method: 8015B - Diesel Range Organics (DRO) (GC)

Client Sample ID: LRTO SW-2

Date Collected: 11/21/12 09:00

Date Received: 11/21/12 13:24

Lab Sample ID: 720-46158-1

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Motor Oil Range Organics [C24-C36]	380		100		ug/L		11/21/12 21:10	11/25/12 07:33	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
p-Terphenyl	69		23 - 156				11/21/12 21:10	11/25/12 07:33	1

Client Sample ID: LRTO SW-5

Date Collected: 11/21/12 08:50

Date Received: 11/21/12 13:24

Lab Sample ID: 720-46158-2

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Motor Oil Range Organics [C24-C36]	670		100		ug/L		11/21/12 21:10	11/25/12 08:02	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
p-Terphenyl	117		23 - 156				11/21/12 21:10	11/25/12 08:02	1

Client Sample ID: LRTO S PARR SW-11

Date Collected: 11/21/12 07:31

Date Received: 11/21/12 13:24

Lab Sample ID: 720-46158-3

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Motor Oil Range Organics [C24-C36]	190		100		ug/L		11/21/12 21:10	11/25/12 08:31	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
p-Terphenyl	98		23 - 156				11/21/12 21:10	11/25/12 08:31	1

Client Sample ID: LRTO N PARR SW-12

Date Collected: 11/21/12 07:59

Date Received: 11/21/12 13:24

Lab Sample ID: 720-46158-4

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Motor Oil Range Organics [C24-C36]	860		100		ug/L		11/21/12 21:10	11/25/12 09:00	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
p-Terphenyl	120		23 - 156				11/21/12 21:10	11/25/12 09:00	1

TestAmerica Pleasanton

# Client Sample Results

Client: Environmental Technical Services  
Project/Site: LRT SW ANNUAL

TestAmerica Job ID: 720-46158-1

## Method: 8081A - Organochlorine Pesticides (GC)

Client Sample ID: LRTO N PARR SW-12

Date Collected: 11/21/12 07:59

Date Received: 11/21/12 13:24

Lab Sample ID: 720-46158-4

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		0.061		ug/L		11/21/12 19:42	11/28/12 05:57	1
Dieldrin	ND		0.061		ug/L		11/21/12 19:42	11/28/12 05:57	1
Endrin aldehyde	ND		0.061		ug/L		11/21/12 19:42	11/28/12 05:57	1
Endrin	ND		0.061		ug/L		11/21/12 19:42	11/28/12 05:57	1
Endrin ketone	ND		0.061		ug/L		11/21/12 19:42	11/28/12 05:57	1
Heptachlor	ND		0.061		ug/L		11/21/12 19:42	11/28/12 05:57	1
Heptachlor epoxide	ND		0.061		ug/L		11/21/12 19:42	11/28/12 05:57	1
4,4'-DDT	ND		0.061		ug/L		11/21/12 19:42	11/28/12 05:57	1
4,4'-DDE	ND		0.061		ug/L		11/21/12 19:42	11/28/12 05:57	1
4,4'-DDD	ND		0.061		ug/L		11/21/12 19:42	11/28/12 05:57	1
Endosulfan I	ND		0.061		ug/L		11/21/12 19:42	11/28/12 05:57	1
Endosulfan II	ND		0.061		ug/L		11/21/12 19:42	11/28/12 05:57	1
alpha-BHC	ND		0.061		ug/L		11/21/12 19:42	11/28/12 05:57	1
beta-BHC	ND		0.061		ug/L		11/21/12 19:42	11/28/12 05:57	1
gamma-BHC (Lindane)	ND		0.061		ug/L		11/21/12 19:42	11/28/12 05:57	1
delta-BHC	ND		0.061		ug/L		11/21/12 19:42	11/28/12 05:57	1
Endosulfan sulfate	ND		0.061		ug/L		11/21/12 19:42	11/28/12 05:57	1
Methoxychlor	ND		0.061		ug/L		11/21/12 19:42	11/28/12 05:57	1
Toxaphene	ND		1.0		ug/L		11/21/12 19:42	11/28/12 05:57	1
Chlordane (technical)	ND		1.0		ug/L		11/21/12 19:42	11/28/12 05:57	1
alpha-Chlordane	ND		0.061		ug/L		11/21/12 19:42	11/28/12 05:57	1
gamma-Chlordane	ND		0.061		ug/L		11/21/12 19:42	11/28/12 05:57	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	51		36 - 112				11/21/12 19:42	11/28/12 05:57	1
DCB Decachlorobiphenyl	19		14 - 103				11/21/12 19:42	11/28/12 05:57	1

TestAmerica Pleasanton

# Client Sample Results

Client: Environmental Technical Services  
Project/Site: LRT SW ANNUAL

TestAmerica Job ID: 720-46158-1

## Method: 200.7 Rev 4.4 - Metals (ICP)

Client Sample ID: LRTO SW-2

Date Collected: 11/21/12 09:00

Date Received: 11/21/12 13:24

Lab Sample ID: 720-46158-1

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	ND		0.020		mg/L		11/27/12 10:22	11/27/12 19:30	1
Lead	0.013		0.0050		mg/L		11/27/12 10:22	11/27/12 19:30	1
Vanadium	0.014		0.010		mg/L		11/27/12 10:22	11/27/12 19:30	1
Zinc	0.12		0.020		mg/L		11/27/12 10:22	11/27/12 19:30	1
Iron	9.7		0.20		mg/L		11/27/12 10:22	11/27/12 19:30	1
Aluminum	0.90		0.20		mg/L		11/27/12 10:22	11/27/12 19:30	1

Client Sample ID: LRTO SW-5

Date Collected: 11/21/12 08:50

Date Received: 11/21/12 13:24

Lab Sample ID: 720-46158-2

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	ND		0.020		mg/L		11/27/12 10:22	11/27/12 19:35	1
Lead	0.015		0.0050		mg/L		11/27/12 10:22	11/27/12 19:35	1
Vanadium	ND		0.010		mg/L		11/27/12 10:22	11/27/12 19:35	1
Zinc	0.085		0.020		mg/L		11/27/12 10:22	11/27/12 19:35	1
Iron	1.4		0.20		mg/L		11/27/12 10:22	11/27/12 19:35	1
Aluminum	0.57		0.20		mg/L		11/27/12 10:22	11/27/12 19:35	1

Client Sample ID: LRTO S PARR SW-11

Date Collected: 11/21/12 07:31

Date Received: 11/21/12 13:24

Lab Sample ID: 720-46158-3

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	ND		0.020		mg/L		11/27/12 10:22	11/27/12 19:48	1
Lead	ND		0.0050		mg/L		11/27/12 10:22	11/27/12 19:48	1
Vanadium	0.040		0.010		mg/L		11/27/12 10:22	11/27/12 19:48	1
Zinc	ND		0.020		mg/L		11/27/12 10:22	11/27/12 19:48	1
Iron	ND		0.20		mg/L		11/27/12 10:22	11/27/12 19:48	1
Aluminum	ND		0.20		mg/L		11/27/12 10:22	11/27/12 19:48	1

Client Sample ID: LRTO N PARR SW-12

Date Collected: 11/21/12 07:59

Date Received: 11/21/12 13:24

Lab Sample ID: 720-46158-4

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	ND		0.020		mg/L		11/27/12 10:22	11/27/12 19:53	1
Lead	0.014		0.0050		mg/L		11/27/12 10:22	11/27/12 19:53	1
Vanadium	0.022		0.010		mg/L		11/27/12 10:22	11/27/12 19:53	1
Zinc	0.082		0.020		mg/L		11/27/12 10:22	11/27/12 19:53	1
Iron	4.8		0.20		mg/L		11/27/12 10:22	11/27/12 19:53	1
Aluminum	4.1		0.20		mg/L		11/27/12 10:22	11/27/12 19:53	1

TestAmerica Pleasanton

# Client Sample Results

Client: Environmental Technical Services  
Project/Site: LRT SW ANNUAL

TestAmerica Job ID: 720-46158-1

## General Chemistry

Client Sample ID: LRT0 SW-2

Date Collected: 11/21/12 09:00

Date Received: 11/21/12 13:24

Lab Sample ID: 720-46158-1

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM (Oil & Grease)	ND		5.1		mg/L		11/29/12 06:40	11/29/12 10:17	1
Chemical Oxygen Demand	130		20		mg/L			11/28/12 13:30	1
TOC Dup	1.5		1.0		mg/L			11/30/12 01:35	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	140		10		umhos/cm			11/27/12 10:15	1
Total Suspended Solids	290		32		mg/L			11/26/12 17:47	1

Client Sample ID: LRT0 SW-5

Date Collected: 11/21/12 08:50

Date Received: 11/21/12 13:24

Lab Sample ID: 720-46158-2

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM (Oil & Grease)	ND		5.0		mg/L		11/29/12 06:46	11/29/12 10:28	1
Chemical Oxygen Demand	ND		20		mg/L			11/28/12 13:30	1
TOC Dup	2.5		1.0		mg/L			11/30/12 01:51	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	68		10		umhos/cm			11/27/12 10:17	1
Total Suspended Solids	11		10		mg/L			11/26/12 17:47	1

Client Sample ID: LRT0 S PARR SW-11

Date Collected: 11/21/12 07:31

Date Received: 11/21/12 13:24

Lab Sample ID: 720-46158-3

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM (Oil & Grease)	ND		5.0		mg/L		11/29/12 06:52	11/29/12 10:38	1
Chemical Oxygen Demand	ND		20		mg/L			11/28/12 13:30	1
TOC Dup	1.5		1.0		mg/L			11/30/12 02:27	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	97		10		umhos/cm			11/27/12 10:19	1
Total Suspended Solids	ND		10		mg/L			11/26/12 17:47	1

Client Sample ID: LRT0 N PARR SW-12

Date Collected: 11/21/12 07:59

Date Received: 11/21/12 13:24

Lab Sample ID: 720-46158-4

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM (Oil & Grease)	ND		5.0		mg/L		11/29/12 06:58	11/29/12 10:49	1
Chemical Oxygen Demand	43		20		mg/L			11/28/12 13:30	1
TOC Dup	7.7		1.0		mg/L			11/30/12 02:43	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	150		10		umhos/cm			11/27/12 10:20	1
Total Suspended Solids	57		10		mg/L			11/26/12 17:47	1

TestAmerica Pleasanton



# QC Sample Results

Client: Environmental Technical Services  
Project/Site: LRT SW ANNUAL

TestAmerica Job ID: 720-46158-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS

Lab Sample ID: MB 720-125798/5

Matrix: Water

Analysis Batch: 125798

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.50		ug/L			11/26/12 09:22	1
Benzene	ND		0.50		ug/L			11/26/12 09:22	1
Ethylbenzene	ND		0.50		ug/L			11/26/12 09:22	1
Toluene	ND		0.50		ug/L			11/26/12 09:22	1
Xylenes, Total	ND		1.0		ug/L			11/26/12 09:22	1
Gasoline Range Organics (GRO)	ND		50		ug/L			11/26/12 09:22	1
-C5-C12									

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	99		67 - 130		11/26/12 09:22	1
1,2-Dichloroethane-d4 (Surr)	101		75 - 138		11/26/12 09:22	1
Toluene-d8 (Surr)	94		70 - 130		11/26/12 09:22	1

Lab Sample ID: LCS 720-125798/6

Matrix: Water

Analysis Batch: 125798

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl tert-butyl ether	25.0	23.5		ug/L		94	62 - 130
Benzene	25.0	22.2		ug/L		89	79 - 130
Ethylbenzene	25.0	24.1		ug/L		96	80 - 120
Toluene	25.0	23.4		ug/L		93	78 - 120
m-Xylene & p-Xylene	50.0	48.2		ug/L		96	70 - 142
o-Xylene	25.0	24.6		ug/L		98	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	103		67 - 130
1,2-Dichloroethane-d4 (Surr)	101		75 - 138
Toluene-d8 (Surr)	98		70 - 130

Lab Sample ID: LCS 720-125798/8

Matrix: Water

Analysis Batch: 125798

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)	500	494		ug/L		99	62 - 120
-C5-C12							

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	101		67 - 130
1,2-Dichloroethane-d4 (Surr)	105		75 - 138
Toluene-d8 (Surr)	98		70 - 130

TestAmerica Pleasanton

# QC Sample Results

Client: Environmental Technical Services  
Project/Site: LRT SW ANNUAL

TestAmerica Job ID: 720-46158-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

Lab Sample ID: LCSD 720-125798/7

Matrix: Water

Analysis Batch: 125798

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methyl tert-butyl ether	25.0	23.6		ug/L		95	62 - 130	1	20
Benzene	25.0	21.8		ug/L		87	79 - 130	2	20
Ethylbenzene	25.0	23.0		ug/L		92	80 - 120	5	20
Toluene	25.0	22.2		ug/L		89	78 - 120	5	20
m-Xylene & p-Xylene	50.0	46.4		ug/L		93	70 - 142	4	20
o-Xylene	25.0	23.4		ug/L		94	70 - 130	5	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	99		67 - 130
1,2-Dichloroethane-d4 (Surr)	100		75 - 138
Toluene-d8 (Surr)	100		70 - 130

Lab Sample ID: LCSD 720-125798/9

Matrix: Water

Analysis Batch: 125798

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)	500	483		ug/L		97	62 - 120	2	20
-C5-C12									

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	101		67 - 130
1,2-Dichloroethane-d4 (Surr)	102		75 - 138
Toluene-d8 (Surr)	97		70 - 130

Lab Sample ID: 720-46158-4 MS

Matrix: Water

Analysis Batch: 125798

Client Sample ID: LRTO N PARR SW-12

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl tert-butyl ether	ND		25.0	23.9		ug/L		95	60 - 138
Benzene	ND		25.0	21.3		ug/L		85	60 - 140
Ethylbenzene	ND		25.0	22.6		ug/L		90	60 - 140
Toluene	ND		25.0	21.8		ug/L		87	60 - 140
m-Xylene & p-Xylene	ND		50.0	46.0		ug/L		92	60 - 140
o-Xylene	ND		25.0	23.5		ug/L		94	60 - 140

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene	105		67 - 130
1,2-Dichloroethane-d4 (Surr)	106		75 - 138
Toluene-d8 (Surr)	100		70 - 130

TestAmerica Pleasanton

# QC Sample Results

Client: Environmental Technical Services  
Project/Site: LRT SW ANNUAL

TestAmerica Job ID: 720-46158-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

Lab Sample ID: 720-46158-4 MSD

Matrix: Water

Analysis Batch: 125798

Client Sample ID: LRTO N PARR SW-12

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methyl tert-butyl ether	ND		25.0	24.5		ug/L		98	60 - 138	3	20
Benzene	ND		25.0	21.3		ug/L		85	60 - 140	0	20
Ethylbenzene	ND		25.0	21.9		ug/L		88	60 - 140	3	20
Toluene	ND		25.0	21.5		ug/L		86	60 - 140	2	20
m-Xylene & p-Xylene	ND		50.0	44.5		ug/L		89	60 - 140	3	20
o-Xylene	ND		25.0	23.0		ug/L		92	60 - 140	2	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
4-Bromofluorobenzene	104		67 - 130								
1,2-Dichloroethane-d4 (Surr)	106		75 - 138								
Toluene-d8 (Surr)	100		70 - 130								

## Method: 8015B - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 720-125685/1-A

Matrix: Water

Analysis Batch: 125725

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 125685

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Motor Oil Range Organics [C24-C36]	ND		99		ug/L		11/21/12 14:07	11/23/12 09:51	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
p-Terphenyl	87		23 - 156				11/21/12 14:07	11/23/12 09:51	1

Lab Sample ID: LCS 720-125685/2-A

Matrix: Water

Analysis Batch: 125725

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 125685

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Diesel Range Organics [C10-C28]	2500	1600		ug/L		64	40 - 150		
Surrogate	LCS %Recovery	LCS Qualifier	Limits						
p-Terphenyl	83		23 - 156						

Lab Sample ID: LCSD 720-125685/3-A

Matrix: Water

Analysis Batch: 125725

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 125685

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	2500	1780		ug/L		71	40 - 150	11	35
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
p-Terphenyl	88		23 - 156						

TestAmerica Pleasanton

# QC Sample Results

Client: Environmental Technical Services  
Project/Site: LRT SW ANNUAL

TestAmerica Job ID: 720-46158-1

## Method: 8081A - Organochlorine Pesticides (GC)

Lab Sample ID: MB 720-125683/1-A

Matrix: Water

Analysis Batch: 125905

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 125683

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		0.060		ug/L		11/21/12 14:01	11/27/12 21:12	1
Dieldrin	ND		0.060		ug/L		11/21/12 14:01	11/27/12 21:12	1
Endrin aldehyde	ND		0.060		ug/L		11/21/12 14:01	11/27/12 21:12	1
Endrin	ND		0.060		ug/L		11/21/12 14:01	11/27/12 21:12	1
Endrin ketone	ND		0.060		ug/L		11/21/12 14:01	11/27/12 21:12	1
Heptachlor	ND		0.060		ug/L		11/21/12 14:01	11/27/12 21:12	1
Heptachlor epoxide	ND		0.060		ug/L		11/21/12 14:01	11/27/12 21:12	1
4,4'-DDT	ND		0.060		ug/L		11/21/12 14:01	11/27/12 21:12	1
4,4'-DDE	ND		0.060		ug/L		11/21/12 14:01	11/27/12 21:12	1
4,4'-DDD	ND		0.060		ug/L		11/21/12 14:01	11/27/12 21:12	1
Endosulfan I	ND		0.060		ug/L		11/21/12 14:01	11/27/12 21:12	1
Endosulfan II	ND		0.060		ug/L		11/21/12 14:01	11/27/12 21:12	1
alpha-BHC	ND		0.060		ug/L		11/21/12 14:01	11/27/12 21:12	1
beta-BHC	ND		0.060		ug/L		11/21/12 14:01	11/27/12 21:12	1
gamma-BHC (Lindane)	ND		0.060		ug/L		11/21/12 14:01	11/27/12 21:12	1
delta-BHC	ND		0.060		ug/L		11/21/12 14:01	11/27/12 21:12	1
Endosulfan sulfate	ND		0.060		ug/L		11/21/12 14:01	11/27/12 21:12	1
Methoxychlor	ND		0.060		ug/L		11/21/12 14:01	11/27/12 21:12	1
Toxaphene	ND		1.0		ug/L		11/21/12 14:01	11/27/12 21:12	1
Chlordane (technical)	ND		1.0		ug/L		11/21/12 14:01	11/27/12 21:12	1
alpha-Chlordane	ND		0.060		ug/L		11/21/12 14:01	11/27/12 21:12	1
gamma-Chlordane	ND		0.060		ug/L		11/21/12 14:01	11/27/12 21:12	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	74		36 - 112	11/21/12 14:01	11/27/12 21:12	1
DCB Decachlorobiphenyl	28		14 - 103	11/21/12 14:01	11/27/12 21:12	1

Lab Sample ID: LCS 720-125683/2-A

Matrix: Water

Analysis Batch: 125905

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 125683

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aldrin	0.500	0.355		ug/L		71	44 - 120
Dieldrin	0.500	0.439		ug/L		88	43 - 120
Endrin	0.500	0.435		ug/L		87	15 - 138
Heptachlor	0.500	0.376		ug/L		75	17 - 128
4,4'-DDT	0.500	0.438		ug/L		88	46 - 120
gamma-BHC (Lindane)	0.500	0.432		ug/L		86	46 - 121

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Tetrachloro-m-xylene	74		36 - 112
DCB Decachlorobiphenyl	32		14 - 103

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# QC Sample Results

Client: Environmental Technical Services  
Project/Site: LRT SW ANNUAL

TestAmerica Job ID: 720-46158-1

## Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCSD 720-125683/3-A

Matrix: Water

Analysis Batch: 125905

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 125683

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aldrin	0.500	0.346		ug/L		69	44 - 120	3	20
Dieldrin	0.500	0.436		ug/L		87	43 - 120	1	20
Endrin	0.500	0.432		ug/L		86	15 - 138	1	20
Heptachlor	0.500	0.370		ug/L		74	17 - 128	2	20
4,4'-DDT	0.500	0.433		ug/L		87	46 - 120	1	20
gamma-BHC (Lindane)	0.500	0.427		ug/L		85	46 - 121	1	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Tetrachloro-m-xylene	72		36 - 112
DCB Decachlorobiphenyl	28		14 - 103

## Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 720-125890/1-A

Matrix: Water

Analysis Batch: 125944

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 125890

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	ND		0.020		mg/L		11/27/12 10:22	11/27/12 18:55	1
Lead	ND		0.0050		mg/L		11/27/12 10:22	11/27/12 18:55	1
Vanadium	ND		0.010		mg/L		11/27/12 10:22	11/27/12 18:55	1
Zinc	ND		0.020		mg/L		11/27/12 10:22	11/27/12 18:55	1
Iron	ND		0.20		mg/L		11/27/12 10:22	11/27/12 18:55	1
Aluminum	ND		0.20		mg/L		11/27/12 10:22	11/27/12 18:55	1

Lab Sample ID: LCS 720-125890/2-A

Matrix: Water

Analysis Batch: 125944

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 125890

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Copper	1.00	0.948		mg/L		95	85 - 115
Lead	1.00	0.956		mg/L		96	85 - 115
Vanadium	1.00	0.934		mg/L		93	85 - 115
Zinc	1.00	0.944		mg/L		94	85 - 115
Iron	10.0	10.3		mg/L		103	85 - 115
Aluminum	10.0	9.93		mg/L		99	85 - 115

Lab Sample ID: LCSD 720-125890/3-A

Matrix: Water

Analysis Batch: 125944

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 125890

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Copper	1.00	0.946		mg/L		95	85 - 115	0	20
Lead	1.00	0.965		mg/L		96	85 - 115	1	20
Vanadium	1.00	0.935		mg/L		93	85 - 115	0	20
Zinc	1.00	0.952		mg/L		95	85 - 115	1	20
Iron	10.0	10.2		mg/L		102	85 - 115	1	20
Aluminum	10.0	9.95		mg/L		99	85 - 115	0	20

TestAmerica Pleasanton

# QC Sample Results

Client: Environmental Technical Services  
Project/Site: LRT SW ANNUAL

TestAmerica Job ID: 720-46158-1

## Method: 1664A - HEM and SGT-HEM

Lab Sample ID: MB 500-171237/1-A

Matrix: Water

Analysis Batch: 171238

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 171237

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM (Oil & Grease)	ND		5.0		mg/L		11/29/12 05:10	11/29/12 07:40	1

Lab Sample ID: LCS 500-171237/2-A

Matrix: Water

Analysis Batch: 171238

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 171237

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
HEM (Oil & Grease)	40.0	40.9		mg/L		102	78 - 114

## Method: 410.4 - COD

Lab Sample ID: MB 720-125964/8

Matrix: Water

Analysis Batch: 125964

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		20		mg/L			11/28/12 13:30	1

Lab Sample ID: LCS 720-125964/9

Matrix: Water

Analysis Batch: 125964

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chemical Oxygen Demand	200	196		mg/L		98	90 - 110

## Method: SM 2510B - Conductivity, Specific Conductance

Lab Sample ID: MB 720-125892/2

Matrix: Water

Analysis Batch: 125892

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	ND		10		umhos/cm			11/27/12 09:56	1

Lab Sample ID: LCS 720-125892/3

Matrix: Water

Analysis Batch: 125892

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Specific Conductance	1000	1000		umhos/cm		100	90 - 110

Lab Sample ID: LCSD 720-125892/4

Matrix: Water

Analysis Batch: 125892

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Specific Conductance	1000	990		umhos/cm		99	90 - 110	1	20

TestAmerica Pleasanton



# QC Sample Results

Client: Environmental Technical Services  
Project/Site: LRT SW ANNUAL

TestAmerica Job ID: 720-46158-1

## Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 720-125851/2

Matrix: Water

Analysis Batch: 125851

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		10		mg/L			11/26/12 17:47	1

Lab Sample ID: LCS 720-125851/1

Matrix: Water

Analysis Batch: 125851

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Suspended Solids	500	417		mg/L		83	69 - 117

Lab Sample ID: 720-46158-3 DU

Matrix: Water

Analysis Batch: 125851

Client Sample ID: LRT0 S PARR SW-11

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Suspended Solids	ND		ND		mg/L		NC	10

## Method: SM 5310C - TOC

Lab Sample ID: MB 500-171471/3

Matrix: Water

Analysis Batch: 171471

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
TOC Dup	ND		1.0		mg/L			11/29/12 23:36	1

Lab Sample ID: LCS 500-171471/4

Matrix: Water

Analysis Batch: 171471

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
TOC Result 1	10.0	9.61		mg/L		96	80 - 120
TOC Result 2	10.0	9.63		mg/L		96	80 - 120
TOC Dup	10.0	9.62		mg/L		96	80 - 120

TestAmerica Pleasanton

## QC Association Summary

Client: Environmental Technical Services  
Project/Site: LRT SW ANNUAL

TestAmerica Job ID: 720-46158-1

### GC/MS VOA

#### Analysis Batch: 125798

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-46158-1	LRTO SW-2	Total/NA	Water	8260B/CA_LUFT MS	
720-46158-2	LRTO SW-5	Total/NA	Water	8260B/CA_LUFT MS	
720-46158-3	LRTO S PARR SW-11	Total/NA	Water	8260B/CA_LUFT MS	
720-46158-4	LRTO N PARR SW-12	Total/NA	Water	8260B/CA_LUFT MS	
720-46158-4 MS	LRTO N PARR SW-12	Total/NA	Water	8260B/CA_LUFT MS	
720-46158-4 MSD	LRTO N PARR SW-12	Total/NA	Water	8260B/CA_LUFT MS	
LCS 720-125798/6	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	
LCS 720-125798/8	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	
LCSD 720-125798/7	Lab Control Sample Dup	Total/NA	Water	8260B/CA_LUFT MS	
LCSD 720-125798/9	Lab Control Sample Dup	Total/NA	Water	8260B/CA_LUFT MS	
MB 720-125798/5	Method Blank	Total/NA	Water	8260B/CA_LUFT MS	

### GC Semi VOA

#### Prep Batch: 125683

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-46158-4	LRTO N PARR SW-12	Total/NA	Water	3510C	
LCS 720-125683/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 720-125683/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
MB 720-125683/1-A	Method Blank	Total/NA	Water	3510C	

#### Prep Batch: 125685

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-46158-1	LRTO SW-2	Total/NA	Water	3510C	
720-46158-2	LRTO SW-5	Total/NA	Water	3510C	
720-46158-3	LRTO S PARR SW-11	Total/NA	Water	3510C	
720-46158-4	LRTO N PARR SW-12	Total/NA	Water	3510C	
LCS 720-125685/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 720-125685/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
MB 720-125685/1-A	Method Blank	Total/NA	Water	3510C	

#### Analysis Batch: 125725

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 720-125685/2-A	Lab Control Sample	Total/NA	Water	8015B	125685
LCSD 720-125685/3-A	Lab Control Sample Dup	Total/NA	Water	8015B	125685
MB 720-125685/1-A	Method Blank	Total/NA	Water	8015B	125685

#### Analysis Batch: 125780

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-46158-1	LRTO SW-2	Total/NA	Water	8015B	125685
720-46158-2	LRTO SW-5	Total/NA	Water	8015B	125685
720-46158-3	LRTO S PARR SW-11	Total/NA	Water	8015B	125685

TestAmerica Pleasanton

# QC Association Summary

Client: Environmental Technical Services  
Project/Site: LRT SW ANNUAL

TestAmerica Job ID: 720-46158-1

## GC Semi VOA (Continued)

### Analysis Batch: 125780 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-46158-4	LRTO N PARR SW-12	Total/NA	Water	8015B	125685

### Analysis Batch: 125905

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-46158-4	LRTO N PARR SW-12	Total/NA	Water	8081A	125683
LCS 720-125683/2-A	Lab Control Sample	Total/NA	Water	8081A	125683
LCSD 720-125683/3-A	Lab Control Sample Dup	Total/NA	Water	8081A	125683
MB 720-125683/1-A	Method Blank	Total/NA	Water	8081A	125683

## Metals

### Prep Batch: 125890

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-46158-1	LRTO SW-2	Total/NA	Water	200.7	
720-46158-2	LRTO SW-5	Total/NA	Water	200.7	
720-46158-3	LRTO S PARR SW-11	Total/NA	Water	200.7	
720-46158-4	LRTO N PARR SW-12	Total/NA	Water	200.7	
LCS 720-125890/2-A	Lab Control Sample	Total/NA	Water	200.7	
LCSD 720-125890/3-A	Lab Control Sample Dup	Total/NA	Water	200.7	
MB 720-125890/1-A	Method Blank	Total/NA	Water	200.7	

### Analysis Batch: 125944

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-46158-1	LRTO SW-2	Total/NA	Water	200.7 Rev 4.4	125890
720-46158-2	LRTO SW-5	Total/NA	Water	200.7 Rev 4.4	125890
720-46158-3	LRTO S PARR SW-11	Total/NA	Water	200.7 Rev 4.4	125890
720-46158-4	LRTO N PARR SW-12	Total/NA	Water	200.7 Rev 4.4	125890
LCS 720-125890/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	125890
LCSD 720-125890/3-A	Lab Control Sample Dup	Total/NA	Water	200.7 Rev 4.4	125890
MB 720-125890/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	125890

## General Chemistry

### Analysis Batch: 125851

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-46158-1	LRTO SW-2	Total/NA	Water	SM 2540D	
720-46158-2	LRTO SW-5	Total/NA	Water	SM 2540D	
720-46158-3	LRTO S PARR SW-11	Total/NA	Water	SM 2540D	
720-46158-3 DU	LRTO S PARR SW-11	Total/NA	Water	SM 2540D	
720-46158-4	LRTO N PARR SW-12	Total/NA	Water	SM 2540D	
LCS 720-125851/1	Lab Control Sample	Total/NA	Water	SM 2540D	
MB 720-125851/2	Method Blank	Total/NA	Water	SM 2540D	

### Analysis Batch: 125892

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-46158-1	LRTO SW-2	Total/NA	Water	SM 2510B	
720-46158-2	LRTO SW-5	Total/NA	Water	SM 2510B	
720-46158-3	LRTO S PARR SW-11	Total/NA	Water	SM 2510B	
720-46158-4	LRTO N PARR SW-12	Total/NA	Water	SM 2510B	
LCS 720-125892/3	Lab Control Sample	Total/NA	Water	SM 2510B	

TestAmerica Pleasanton

# QC Association Summary

Client: Environmental Technical Services  
Project/Site: LRT SW ANNUAL

TestAmerica Job ID: 720-46158-1

## General Chemistry (Continued)

### Analysis Batch: 125892 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 720-125892/4	Lab Control Sample Dup	Total/NA	Water	SM 2510B	
MB 720-125892/2	Method Blank	Total/NA	Water	SM 2510B	

### Analysis Batch: 125964

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-46158-1	LRTO SW-2	Total/NA	Water	410.4	
720-46158-2	LRTO SW-5	Total/NA	Water	410.4	
720-46158-3	LRTO S PARR SW-11	Total/NA	Water	410.4	
720-46158-4	LRTO N PARR SW-12	Total/NA	Water	410.4	
LCS 720-125964/9	Lab Control Sample	Total/NA	Water	410.4	
MB 720-125964/8	Method Blank	Total/NA	Water	410.4	

### Prep Batch: 171237

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-46158-1	LRTO SW-2	Total/NA	Water	1664A	
720-46158-2	LRTO SW-5	Total/NA	Water	1664A	
720-46158-3	LRTO S PARR SW-11	Total/NA	Water	1664A	
720-46158-4	LRTO N PARR SW-12	Total/NA	Water	1664A	
LCS 500-171237/2-A	Lab Control Sample	Total/NA	Water	1664A	
MB 500-171237/1-A	Method Blank	Total/NA	Water	1664A	

### Analysis Batch: 171238

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-46158-1	LRTO SW-2	Total/NA	Water	1664A	171237
720-46158-2	LRTO SW-5	Total/NA	Water	1664A	171237
720-46158-3	LRTO S PARR SW-11	Total/NA	Water	1664A	171237
720-46158-4	LRTO N PARR SW-12	Total/NA	Water	1664A	171237
LCS 500-171237/2-A	Lab Control Sample	Total/NA	Water	1664A	171237
MB 500-171237/1-A	Method Blank	Total/NA	Water	1664A	171237

### Analysis Batch: 171471

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-46158-1	LRTO SW-2	Total/NA	Water	SM 5310C	
720-46158-2	LRTO SW-5	Total/NA	Water	SM 5310C	
720-46158-3	LRTO S PARR SW-11	Total/NA	Water	SM 5310C	
720-46158-4	LRTO N PARR SW-12	Total/NA	Water	SM 5310C	
LCS 500-171471/4	Lab Control Sample	Total/NA	Water	SM 5310C	
MB 500-171471/3	Method Blank	Total/NA	Water	SM 5310C	

TestAmerica Pleasanton

# Lab Chronicle

Client: Environmental Technical Services  
Project/Site: LRT SW ANNUAL

TestAmerica Job ID: 720-46158-1

**Client Sample ID: LRTO SW-2**

**Date Collected: 11/21/12 09:00**

**Date Received: 11/21/12 13:24**

**Lab Sample ID: 720-46158-1**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		1	125798	11/26/12 11:56	AC	TAL SF
Total/NA	Prep	3510C			125685	11/21/12 21:10	RU	TAL SF
Total/NA	Analysis	8015B		1	125780	11/25/12 07:33	DH	TAL SF
Total/NA	Prep	200.7			125890	11/27/12 10:22	ET	TAL SF
Total/NA	Analysis	200.7 Rev 4.4		1	125944	11/27/12 19:30	SK	TAL SF
Total/NA	Prep	1664A			171237	11/29/12 06:40	MTB	TAL CHI
Total/NA	Analysis	1664A		1	171238	11/29/12 10:17	MTB	TAL CHI
Total/NA	Analysis	SM 5310C		1	171471	11/30/12 01:35	HMW	TAL CHI
Total/NA	Analysis	SM 2540D		1	125851	11/26/12 17:47	DFR	TAL SF
Total/NA	Analysis	SM 2510B		1	125892	11/27/12 10:15	MJK	TAL SF
Total/NA	Analysis	410.4		1	125964	11/28/12 13:30	MJK	TAL SF

**Client Sample ID: LRTO SW-5**

**Date Collected: 11/21/12 08:50**

**Date Received: 11/21/12 13:24**

**Lab Sample ID: 720-46158-2**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		1	125798	11/26/12 12:28	AC	TAL SF
Total/NA	Prep	3510C			125685	11/21/12 21:10	RU	TAL SF
Total/NA	Analysis	8015B		1	125780	11/25/12 08:02	DH	TAL SF
Total/NA	Prep	200.7			125890	11/27/12 10:22	ET	TAL SF
Total/NA	Analysis	200.7 Rev 4.4		1	125944	11/27/12 19:35	SK	TAL SF
Total/NA	Prep	1664A			171237	11/29/12 06:46	MTB	TAL CHI
Total/NA	Analysis	1664A		1	171238	11/29/12 10:28	MTB	TAL CHI
Total/NA	Analysis	SM 5310C		1	171471	11/30/12 01:51	HMW	TAL CHI
Total/NA	Analysis	SM 2540D		1	125851	11/26/12 17:47	DFR	TAL SF
Total/NA	Analysis	SM 2510B		1	125892	11/27/12 10:17	MJK	TAL SF
Total/NA	Analysis	410.4		1	125964	11/28/12 13:30	MJK	TAL SF

**Client Sample ID: LRTO S PARR SW-11**

**Date Collected: 11/21/12 07:31**

**Date Received: 11/21/12 13:24**

**Lab Sample ID: 720-46158-3**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		1	125798	11/26/12 12:59	AC	TAL SF
Total/NA	Prep	3510C			125685	11/21/12 21:10	RU	TAL SF
Total/NA	Analysis	8015B		1	125780	11/25/12 08:31	DH	TAL SF
Total/NA	Prep	200.7			125890	11/27/12 10:22	ET	TAL SF
Total/NA	Analysis	200.7 Rev 4.4		1	125944	11/27/12 19:48	SK	TAL SF
Total/NA	Prep	1664A			171237	11/29/12 06:52	MTB	TAL CHI
Total/NA	Analysis	1664A		1	171238	11/29/12 10:38	MTB	TAL CHI
Total/NA	Analysis	SM 5310C		1	171471	11/30/12 02:27	HMW	TAL CHI

TestAmerica Pleasanton

# Lab Chronicle

Client: Environmental Technical Services  
Project/Site: LRT SW ANNUAL

TestAmerica Job ID: 720-46158-1

**Client Sample ID: LRTO S PARR SW-11**

**Lab Sample ID: 720-46158-3**

**Date Collected: 11/21/12 07:31**

**Matrix: Water**

**Date Received: 11/21/12 13:24**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2540D		1	125851	11/26/12 17:47	DFR	TAL SF
Total/NA	Analysis	SM 2510B		1	125892	11/27/12 10:19	MJK	TAL SF
Total/NA	Analysis	410.4		1	125964	11/28/12 13:30	MJK	TAL SF

**Client Sample ID: LRTO N PARR SW-12**

**Lab Sample ID: 720-46158-4**

**Date Collected: 11/21/12 07:59**

**Matrix: Water**

**Date Received: 11/21/12 13:24**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		1	125798	11/26/12 13:31	AC	TAL SF
Total/NA	Prep	3510C			125685	11/21/12 21:10	RU	TAL SF
Total/NA	Analysis	8015B		1	125780	11/25/12 09:00	DH	TAL SF
Total/NA	Prep	3510C			125683	11/21/12 19:42	RU	TAL SF
Total/NA	Analysis	8081A		1	125905	11/28/12 05:57	RB	TAL SF
Total/NA	Prep	200.7			125890	11/27/12 10:22	ET	TAL SF
Total/NA	Analysis	200.7 Rev 4.4		1	125944	11/27/12 19:53	SK	TAL SF
Total/NA	Prep	1664A			171237	11/29/12 06:58	MTB	TAL CHI
Total/NA	Analysis	1664A		1	171238	11/29/12 10:49	MTB	TAL CHI
Total/NA	Analysis	SM 5310C		1	171471	11/30/12 02:43	HMW	TAL CHI
Total/NA	Analysis	SM 2540D		1	125851	11/26/12 17:47	DFR	TAL SF
Total/NA	Analysis	SM 2510B		1	125892	11/27/12 10:20	MJK	TAL SF
Total/NA	Analysis	410.4		1	125964	11/28/12 13:30	MJK	TAL SF

## Laboratory References:

TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

TAL SF = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919



## Certification Summary

Client: Environmental Technical Services  
Project/Site: LRT SW ANNUAL

TestAmerica Job ID: 720-46158-1

### Laboratory: TestAmerica Pleasanton

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	State Program	9	2496	01-31-14

### Laboratory: TestAmerica Chicago

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alabama	State Program	4	40461	04-30-13
California	NELAC	9	01132CA	04-30-13
Georgia	State Program	4	N/A	04-30-13
Georgia	State Program	4	939	04-30-13
Hawaii	State Program	9	N/A	04-30-13
Illinois	NELAC	5	100201	04-30-13
Indiana	State Program	5	C-IL-02	04-30-13
Iowa	State Program	7	82	05-01-14
Kansas	NELAC	7	E-10161	10-31-13
Kentucky	State Program	4	90023	12-31-12
Kentucky (UST)	State Program	4	66	04-11-13
L-A-B	DoD ELAP		L2304	01-06-13
L-A-B	ISO/IEC 17025		L2304	01-06-13
Louisiana	NELAC	6	30720	06-30-13
Massachusetts	State Program	1	M-IL035	06-30-13
Mississippi	State Program	4	N/A	04-30-13
North Carolina DENR	State Program	4	291	12-31-12
North Dakota	State Program	8	R-194	04-30-13
Oklahoma	State Program	6	8908	08-31-13
South Carolina	State Program	4	77001	04-30-13
Texas	NELAC	6	T104704252-09-TX	02-28-13
USDA	Federal		P330-12-00038	02-06-15
Virginia	NELAC	3	460142	06-14-13
Wisconsin	State Program	5	999580010	08-31-13
Wyoming	State Program	8	8TMS-Q	04-30-13

## Method Summary

Client: Environmental Technical Services  
Project/Site: LRT SW ANNUAL

TestAmerica Job ID: 720-46158-1

Method	Method Description	Protocol	Laboratory
8260B/CA_LUFTM S	8260B / CA LUFT MS	SW846	TAL SF
8015B	Diesel Range Organics (DRO) (GC)	SW846	TAL SF
8081A	Organochlorine Pesticides (GC)	SW846	TAL SF
200.7 Rev 4.4	Metals (ICP)	EPA	TAL SF
1664A	HEM and SGT-HEM	1664A	TAL CHI
410.4	COD	MCAWW	TAL SF
SM 2510B	Conductivity, Specific Conductance	SM	TAL SF
SM 2540D	Solids, Total Suspended (TSS)	SM	TAL SF
SM 5310C	TOC	SM	TAL CHI

### Protocol References:

1664A = EPA-821-98-002

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SM = "Standard Methods For The Examination Of Water And Wastewater",

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

### Laboratory References:

TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

TAL SF = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

## Sample Summary

Client: Environmental Technical Services  
Project/Site: LRT SW ANNUAL

TestAmerica Job ID: 720-46158-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
720-46158-1	LRTO SW-2	Water	11/21/12 09:00	11/21/12 13:24
720-46158-2	LRTO SW-5	Water	11/21/12 08:50	11/21/12 13:24
720-46158-3	LRTO S PARR SW-11	Water	11/21/12 07:31	11/21/12 13:24
720-46158-4	LRTO N PARR SW-12	Water	11/21/12 07:59	11/21/12 13:24

720-46158

Date: *John K. Edwards* 1/25/12

## CHAIN OF CUSTODY/ANALYSES REQUESTED

Environmental Technical Services

1548 Jacob Avenue

San Jose, California 95118

PO. NO. (required) TL

Project Name: LRT SW ANNUAL

## ANNUAL STORMWATER SAMPLES

**MUST ANALYZE USING****40 CFR 136 METHODS**

CLIENT ID	CHK BY SYSTEMS TO BE ANALYZED	DATE	TIME	LAB ID NO	TSS	SPEC COND	TPHG BTX MTBE 8260	TOG 1664	COD	TLC METALS AL, CU, FE, PB, ZN, VN	8081	TOC	TEPH MO
SW-1	<i>NS</i>												
SW-2	<i>X</i>	<i>11/21/12</i>	<i>9:00</i>	<i>1</i>	<i>X</i>	<i>X</i>	<i>X</i>	<i>X</i>	<i>X</i>	<i>X</i>	<i>X</i>	<i>X</i>	<i>X</i>
SW-3	<i>NS</i>												
SW-4													
SW-5	<i>X</i>	<i>11/21/12</i>	<i>8:50</i>	<i>2</i>	<i>X</i>	<i>X</i>	<i>X</i>	<i>X</i>	<i>X</i>	<i>X</i>	<i>X</i>	<i>X</i>	<i>X</i>
SW-6	<i>NS</i>												
SW-7	<i>NS</i>												
S PARR SW-10	<i>NS</i>												
S PARR SW-11	<i>X</i>	<i>11/21/12</i>	<i>7:31</i>	<i>3</i>	<i>X</i>	<i>X</i>	<i>X</i>	<i>X</i>	<i>X</i>	<i>X</i>	<i>X</i>	<i>X</i>	<i>X</i>
N PARR SW-12	<i>X</i>	<i>11/21/12</i>	<i>7:59</i>	<i>4</i>	<i>X</i>	<i>X</i>	<i>X</i>	<i>X</i>	<i>X</i>	<i>X</i>	<i>X</i>	<i>X</i>	<i>X</i>
Sampled/Released By: <i>Timmy Lutz</i> + <i>Helen Machinassy</i>													
Print: <i>Timmy Lutz</i> + <i>Helen Machinassy</i>													
Sign: <i>Helen Machinassy</i>													
Date: <i>11-21-12</i> Time: <i>7:24</i> 9:10													
Released By: _____													
Print: _____													
Sign: _____													
Date: _____ Time: _____													
Released By: _____													
Print: _____													
Sign: _____													
Date: <i>11-21-12</i> Time: <i>1:32</i> 4													
Notes: Please analyze all Systems checked for all analyses listed. NS=Not Sampled (system wasn't discharging)													

Sample SW-2 + SO PARR SW-11 ~~NS~~ OK TO ANALYZE OUT OF TURN

## Login Sample Receipt Checklist

Client: Environmental Technical Services

Job Number: 720-46158-1

Login Number: 46158

List Source: TestAmerica Pleasanton

List Number: 1

Creator: Bullock, Tracy

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	False	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	False	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	False	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

## Login Sample Receipt Checklist

Client: Environmental Technical Services

Job Number: 720-46158-1

Login Number: 46158

List Source: TestAmerica Chicago

List Number: 1

List Creation: 11/24/12 11:32 AM

Creator: Lunt, Jeff T

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	True	



# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Pleasanton

1220 Quarry Lane

Pleasanton, CA 94566

Tel: (925)484-1919

TestAmerica Job ID: 720-46158-2

Client Project/Site: LRT SW ANNUAL

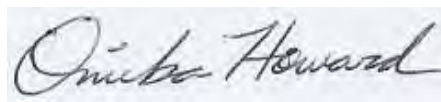
For:

Environmental Technical Services

1548 Jacob Avenue

San Jose, California 95118

Attn: Helen Mawhinney



Authorized for release by:

11/29/2012 11:15:37 AM

Onieka Howard

Project Manager I

[onieka.howard@testamericainc.com](mailto:onieka.howard@testamericainc.com)

### LINKS

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*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*

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## Definitions/Glossary

Client: Environmental Technical Services  
Project/Site: LRT SW ANNUAL

TestAmerica Job ID: 720-46158-2

### Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDA	Minimum detectable activity
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

## Case Narrative

Client: Environmental Technical Services  
Project/Site: LRT SW ANNUAL

TestAmerica Job ID: 720-46158-2

**Job ID: 720-46158-2**

**Laboratory: TestAmerica Pleasanton**

### Narrative

#### Job Narrative 720-46158-2

#### Comments

No additional comments.

#### Receipt

The samples were received on 11/21/2012 1:24 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 5.8° C and 7.0° C.

Except:

All four samples were collected in improper containers for COD. Received only 2-40ml H2SO4 amber vials for TOC, after receipt the lab acidified 1- poly unpreserved 250ml with H2SO4 for COD.

NOTE: Received two unpreserved amber 1L's for SW-5 @ 08:50, this sample has a DUP amber 1L unpreserved. The other three samples have a total of 12 containers, SW-5 has 13 containers.

Sample LRTO S PARR SW-11, 2 of 4 voa vials have headspace.

The container label for the following sample(s) did not match the information listed on the Chain-of-Custody (COC): All the sample container labels list McCampbell label LRTO prior to the COC ID, one container is the exception listed below. The COC lists SW-2, SW-5, S PARR SW-10, N PARR SW-12. Per prior request from the client 11/19/12 use LRTO before Client ID. One amber 1L ESS label: SW-5 11-21-12 08:50 does not have LRTO listed with the CLIENT ID. The 1L is being held (#02M).

Sample(s) were received at the laboratory outside the required temperature criteria: Client noted on the COC " OK to analyze out of temp."

#### GC Semi VOA

No analytical or quality issues were noted.

#### Organic Prep

No analytical or quality issues were noted.

## Detection Summary

Client: Environmental Technical Services  
Project/Site: LRT SW ANNUAL

TestAmerica Job ID: 720-46158-2

**Client Sample ID: LRT0 SW-2**

**Lab Sample ID: 720-46158-1**

No Detections

**Client Sample ID: LRT0 SW-5**

**Lab Sample ID: 720-46158-2**

No Detections

**Client Sample ID: LRT0 S PARR SW-11**

**Lab Sample ID: 720-46158-3**

No Detections

# Client Sample Results

Client: Environmental Technical Services  
Project/Site: LRT SW ANNUAL

TestAmerica Job ID: 720-46158-2

## Method: 8081A - Organochlorine Pesticides (GC)

Client Sample ID: LRT0 SW-2

Date Collected: 11/21/12 09:00

Date Received: 11/21/12 13:24

Lab Sample ID: 720-46158-1

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		0.061		ug/L		11/21/12 19:42	11/28/12 05:03	1
Dieldrin	ND		0.061		ug/L		11/21/12 19:42	11/28/12 05:03	1
Endrin aldehyde	ND		0.061		ug/L		11/21/12 19:42	11/28/12 05:03	1
Endrin	ND		0.061		ug/L		11/21/12 19:42	11/28/12 05:03	1
Endrin ketone	ND		0.061		ug/L		11/21/12 19:42	11/28/12 05:03	1
Heptachlor	ND		0.061		ug/L		11/21/12 19:42	11/28/12 05:03	1
Heptachlor epoxide	ND		0.061		ug/L		11/21/12 19:42	11/28/12 05:03	1
4,4'-DDT	ND		0.061		ug/L		11/21/12 19:42	11/28/12 05:03	1
4,4'-DDE	ND		0.061		ug/L		11/21/12 19:42	11/28/12 05:03	1
4,4'-DDD	ND		0.061		ug/L		11/21/12 19:42	11/28/12 05:03	1
Endosulfan I	ND		0.061		ug/L		11/21/12 19:42	11/28/12 05:03	1
Endosulfan II	ND		0.061		ug/L		11/21/12 19:42	11/28/12 05:03	1
alpha-BHC	ND		0.061		ug/L		11/21/12 19:42	11/28/12 05:03	1
beta-BHC	ND		0.061		ug/L		11/21/12 19:42	11/28/12 05:03	1
gamma-BHC (Lindane)	ND		0.061		ug/L		11/21/12 19:42	11/28/12 05:03	1
delta-BHC	ND		0.061		ug/L		11/21/12 19:42	11/28/12 05:03	1
Endosulfan sulfate	ND		0.061		ug/L		11/21/12 19:42	11/28/12 05:03	1
Methoxychlor	ND		0.061		ug/L		11/21/12 19:42	11/28/12 05:03	1
Toxaphene	ND		1.0		ug/L		11/21/12 19:42	11/28/12 05:03	1
Chlordane (technical)	ND		1.0		ug/L		11/21/12 19:42	11/28/12 05:03	1
alpha-Chlordane	ND		0.061		ug/L		11/21/12 19:42	11/28/12 05:03	1
gamma-Chlordane	ND		0.061		ug/L		11/21/12 19:42	11/28/12 05:03	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	43		36 - 112				11/21/12 19:42	11/28/12 05:03	1
DCB Decachlorobiphenyl	21		14 - 103				11/21/12 19:42	11/28/12 05:03	1

Client Sample ID: LRT0 SW-5

Date Collected: 11/21/12 08:50

Date Received: 11/21/12 13:24

Lab Sample ID: 720-46158-2

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		0.061		ug/L		11/21/12 19:42	11/28/12 05:21	1
Dieldrin	ND		0.061		ug/L		11/21/12 19:42	11/28/12 05:21	1
Endrin aldehyde	ND		0.061		ug/L		11/21/12 19:42	11/28/12 05:21	1
Endrin	ND		0.061		ug/L		11/21/12 19:42	11/28/12 05:21	1
Endrin ketone	ND		0.061		ug/L		11/21/12 19:42	11/28/12 05:21	1
Heptachlor	ND		0.061		ug/L		11/21/12 19:42	11/28/12 05:21	1
Heptachlor epoxide	ND		0.061		ug/L		11/21/12 19:42	11/28/12 05:21	1
4,4'-DDT	ND		0.061		ug/L		11/21/12 19:42	11/28/12 05:21	1
4,4'-DDE	ND		0.061		ug/L		11/21/12 19:42	11/28/12 05:21	1
4,4'-DDD	ND		0.061		ug/L		11/21/12 19:42	11/28/12 05:21	1
Endosulfan I	ND		0.061		ug/L		11/21/12 19:42	11/28/12 05:21	1
Endosulfan II	ND		0.061		ug/L		11/21/12 19:42	11/28/12 05:21	1
alpha-BHC	ND		0.061		ug/L		11/21/12 19:42	11/28/12 05:21	1
beta-BHC	ND		0.061		ug/L		11/21/12 19:42	11/28/12 05:21	1
gamma-BHC (Lindane)	ND		0.061		ug/L		11/21/12 19:42	11/28/12 05:21	1
delta-BHC	ND		0.061		ug/L		11/21/12 19:42	11/28/12 05:21	1
Endosulfan sulfate	ND		0.061		ug/L		11/21/12 19:42	11/28/12 05:21	1
Methoxychlor	ND		0.061		ug/L		11/21/12 19:42	11/28/12 05:21	1
Toxaphene	ND		1.0		ug/L		11/21/12 19:42	11/28/12 05:21	1

TestAmerica Pleasanton

# Client Sample Results

Client: Environmental Technical Services  
Project/Site: LRT SW ANNUAL

TestAmerica Job ID: 720-46158-2

## Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Client Sample ID: LRTO SW-5

Date Collected: 11/21/12 08:50

Date Received: 11/21/12 13:24

Lab Sample ID: 720-46158-2

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlordane (technical)	ND		1.0		ug/L		11/21/12 19:42	11/28/12 05:21	1
alpha-Chlordane	ND		0.061		ug/L		11/21/12 19:42	11/28/12 05:21	1
gamma-Chlordane	ND		0.061		ug/L		11/21/12 19:42	11/28/12 05:21	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	47		36 - 112				11/21/12 19:42	11/28/12 05:21	1
DCB Decachlorobiphenyl	27		14 - 103				11/21/12 19:42	11/28/12 05:21	1

Client Sample ID: LRTO S PARR SW-11

Date Collected: 11/21/12 07:31

Date Received: 11/21/12 13:24

Lab Sample ID: 720-46158-3

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		0.061		ug/L		11/21/12 19:42	11/28/12 05:39	1
Dieldrin	ND		0.061		ug/L		11/21/12 19:42	11/28/12 05:39	1
Endrin aldehyde	ND		0.061		ug/L		11/21/12 19:42	11/28/12 05:39	1
Endrin	ND		0.061		ug/L		11/21/12 19:42	11/28/12 05:39	1
Endrin ketone	ND		0.061		ug/L		11/21/12 19:42	11/28/12 05:39	1
Heptachlor	ND		0.061		ug/L		11/21/12 19:42	11/28/12 05:39	1
Heptachlor epoxide	ND		0.061		ug/L		11/21/12 19:42	11/28/12 05:39	1
4,4'-DDT	ND		0.061		ug/L		11/21/12 19:42	11/28/12 05:39	1
4,4'-DDE	ND		0.061		ug/L		11/21/12 19:42	11/28/12 05:39	1
4,4'-DDD	ND		0.061		ug/L		11/21/12 19:42	11/28/12 05:39	1
Endosulfan I	ND		0.061		ug/L		11/21/12 19:42	11/28/12 05:39	1
Endosulfan II	ND		0.061		ug/L		11/21/12 19:42	11/28/12 05:39	1
alpha-BHC	ND		0.061		ug/L		11/21/12 19:42	11/28/12 05:39	1
beta-BHC	ND		0.061		ug/L		11/21/12 19:42	11/28/12 05:39	1
gamma-BHC (Lindane)	ND		0.061		ug/L		11/21/12 19:42	11/28/12 05:39	1
delta-BHC	ND		0.061		ug/L		11/21/12 19:42	11/28/12 05:39	1
Endosulfan sulfate	ND		0.061		ug/L		11/21/12 19:42	11/28/12 05:39	1
Methoxychlor	ND		0.061		ug/L		11/21/12 19:42	11/28/12 05:39	1
Toxaphene	ND		1.0		ug/L		11/21/12 19:42	11/28/12 05:39	1
Chlordane (technical)	ND		1.0		ug/L		11/21/12 19:42	11/28/12 05:39	1
alpha-Chlordane	ND		0.061		ug/L		11/21/12 19:42	11/28/12 05:39	1
gamma-Chlordane	ND		0.061		ug/L		11/21/12 19:42	11/28/12 05:39	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	45		36 - 112				11/21/12 19:42	11/28/12 05:39	1
DCB Decachlorobiphenyl	25		14 - 103				11/21/12 19:42	11/28/12 05:39	1

TestAmerica Pleasanton



# QC Sample Results

Client: Environmental Technical Services  
Project/Site: LRT SW ANNUAL

TestAmerica Job ID: 720-46158-2

## Method: 8081A - Organochlorine Pesticides (GC)

Lab Sample ID: MB 720-125683/1-A

Matrix: Water

Analysis Batch: 125905

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 125683

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		0.060		ug/L		11/21/12 14:01	11/27/12 21:12	1
Dieldrin	ND		0.060		ug/L		11/21/12 14:01	11/27/12 21:12	1
Endrin aldehyde	ND		0.060		ug/L		11/21/12 14:01	11/27/12 21:12	1
Endrin	ND		0.060		ug/L		11/21/12 14:01	11/27/12 21:12	1
Endrin ketone	ND		0.060		ug/L		11/21/12 14:01	11/27/12 21:12	1
Heptachlor	ND		0.060		ug/L		11/21/12 14:01	11/27/12 21:12	1
Heptachlor epoxide	ND		0.060		ug/L		11/21/12 14:01	11/27/12 21:12	1
4,4'-DDT	ND		0.060		ug/L		11/21/12 14:01	11/27/12 21:12	1
4,4'-DDE	ND		0.060		ug/L		11/21/12 14:01	11/27/12 21:12	1
4,4'-DDD	ND		0.060		ug/L		11/21/12 14:01	11/27/12 21:12	1
Endosulfan I	ND		0.060		ug/L		11/21/12 14:01	11/27/12 21:12	1
Endosulfan II	ND		0.060		ug/L		11/21/12 14:01	11/27/12 21:12	1
alpha-BHC	ND		0.060		ug/L		11/21/12 14:01	11/27/12 21:12	1
beta-BHC	ND		0.060		ug/L		11/21/12 14:01	11/27/12 21:12	1
gamma-BHC (Lindane)	ND		0.060		ug/L		11/21/12 14:01	11/27/12 21:12	1
delta-BHC	ND		0.060		ug/L		11/21/12 14:01	11/27/12 21:12	1
Endosulfan sulfate	ND		0.060		ug/L		11/21/12 14:01	11/27/12 21:12	1
Methoxychlor	ND		0.060		ug/L		11/21/12 14:01	11/27/12 21:12	1
Toxaphene	ND		1.0		ug/L		11/21/12 14:01	11/27/12 21:12	1
Chlordane (technical)	ND		1.0		ug/L		11/21/12 14:01	11/27/12 21:12	1
alpha-Chlordane	ND		0.060		ug/L		11/21/12 14:01	11/27/12 21:12	1
gamma-Chlordane	ND		0.060		ug/L		11/21/12 14:01	11/27/12 21:12	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	74		36 - 112	11/21/12 14:01	11/27/12 21:12	1
DCB Decachlorobiphenyl	28		14 - 103	11/21/12 14:01	11/27/12 21:12	1

Lab Sample ID: LCS 720-125683/2-A

Matrix: Water

Analysis Batch: 125905

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 125683

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aldrin	0.500	0.355		ug/L		71	44 - 120
Dieldrin	0.500	0.439		ug/L		88	43 - 120
Endrin	0.500	0.435		ug/L		87	15 - 138
Heptachlor	0.500	0.376		ug/L		75	17 - 128
4,4'-DDT	0.500	0.438		ug/L		88	46 - 120
gamma-BHC (Lindane)	0.500	0.432		ug/L		86	46 - 121

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Tetrachloro-m-xylene	74		36 - 112
DCB Decachlorobiphenyl	32		14 - 103

TestAmerica Pleasanton

# QC Sample Results

Client: Environmental Technical Services  
Project/Site: LRT SW ANNUAL

TestAmerica Job ID: 720-46158-2

## Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCSD 720-125683/3-A

Matrix: Water

Analysis Batch: 125905

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 125683

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aldrin	0.500	0.346		ug/L		69	44 - 120	3	20
Dieldrin	0.500	0.436		ug/L		87	43 - 120	1	20
Endrin	0.500	0.432		ug/L		86	15 - 138	1	20
Heptachlor	0.500	0.370		ug/L		74	17 - 128	2	20
4,4'-DDT	0.500	0.433		ug/L		87	46 - 120	1	20
gamma-BHC (Lindane)	0.500	0.427		ug/L		85	46 - 121	1	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Tetrachloro-m-xylene	72		36 - 112
DCB Decachlorobiphenyl	28		14 - 103

TestAmerica Pleasanton

## QC Association Summary

Client: Environmental Technical Services  
Project/Site: LRT SW ANNUAL

TestAmerica Job ID: 720-46158-2

### GC Semi VOA

#### Prep Batch: 125683

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-46158-1	LRT0 SW-2	Total/NA	Water	3510C	
720-46158-2	LRT0 SW-5	Total/NA	Water	3510C	
720-46158-3	LRT0 S PARR SW-11	Total/NA	Water	3510C	
LCS 720-125683/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 720-125683/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
MB 720-125683/1-A	Method Blank	Total/NA	Water	3510C	

#### Analysis Batch: 125905

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-46158-1	LRT0 SW-2	Total/NA	Water	8081A	125683
720-46158-2	LRT0 SW-5	Total/NA	Water	8081A	125683
720-46158-3	LRT0 S PARR SW-11	Total/NA	Water	8081A	125683
LCS 720-125683/2-A	Lab Control Sample	Total/NA	Water	8081A	125683
LCSD 720-125683/3-A	Lab Control Sample Dup	Total/NA	Water	8081A	125683
MB 720-125683/1-A	Method Blank	Total/NA	Water	8081A	125683

## Lab Chronicle

Client: Environmental Technical Services  
Project/Site: LRT SW ANNUAL

TestAmerica Job ID: 720-46158-2

### Client Sample ID: LRTO SW-2

Date Collected: 11/21/12 09:00

Date Received: 11/21/12 13:24

### Lab Sample ID: 720-46158-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			125683	11/21/12 19:42	RU	TAL SF
Total/NA	Analysis	8081A		1	125905	11/28/12 05:03	RB	TAL SF

### Client Sample ID: LRTO SW-5

Date Collected: 11/21/12 08:50

Date Received: 11/21/12 13:24

### Lab Sample ID: 720-46158-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			125683	11/21/12 19:42	RU	TAL SF
Total/NA	Analysis	8081A		1	125905	11/28/12 05:21	RB	TAL SF

### Client Sample ID: LRTO S PARR SW-11

Date Collected: 11/21/12 07:31

Date Received: 11/21/12 13:24

### Lab Sample ID: 720-46158-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			125683	11/21/12 19:42	RU	TAL SF
Total/NA	Analysis	8081A		1	125905	11/28/12 05:39	RB	TAL SF

#### Laboratory References:

TAL SF = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

## Certification Summary

Client: Environmental Technical Services  
Project/Site: LRT SW ANNUAL

TestAmerica Job ID: 720-46158-2

### Laboratory: TestAmerica Pleasanton

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	State Program	9	2496	01-31-14

## Method Summary

Client: Environmental Technical Services  
Project/Site: LRT SW ANNUAL

TestAmerica Job ID: 720-46158-2

Method	Method Description	Protocol	Laboratory
8081A	Organochlorine Pesticides (GC)	SW846	TAL SF

**Protocol References:**

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

**Laboratory References:**

TAL SF = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

## Sample Summary

Client: Environmental Technical Services  
Project/Site: LRT SW ANNUAL

TestAmerica Job ID: 720-46158-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
720-46158-1	LRTO SW-2	Water	11/21/12 09:00	11/21/12 13:24
720-46158-2	LRTO SW-5	Water	11/21/12 08:50	11/21/12 13:24
720-46158-3	LRTO S PARR SW-11	Water	11/21/12 07:31	11/21/12 13:24



Vote: Donna Edwards 142435

CLIENT ID	CHK BY SYSTEMS TO BE ANALYZED	DATE	TIME	LAB ID NO	TSS	SPEC COND	TPHG BTX MTBE 8260	TOG 1664	COD	TLC METALS AL, CU, FE, PB, ZN, VN	8081	TOC	TEPH MO
SW-1	NS NS	11/21/12	9:00	1	X	X	X	X	X	X	X	X	X
SW-2	NS NS	11/21/12	9:00	1	X	X	X	X	X	X	X	X	X
SW-3	NS NS				X	X	X	X	X	X	X	X	X
SW-4					X	X	X	X	X	X	X	X	X
SW-5		11/21/12	8:50	2	X	X	X	X	X	X	X	X	X
SW-6	NS				X	X	X	X	X	X	X	X	X
SW-7	NS				X	X	X	X	X	X	X	X	X
S PARR SW-10	NS				X	X	X	X	X	X	X	X	X
S PARR SW-11	X	11/21/12	7:31	3	X	X	X	X	X	X	X	X	X
N PARR SW-12	X	11/21/12	7:59	4	X	X	X	X	X	X	X	X	X

Print: Tony Lee

Sign: Helen Machinery

Date: 11-21-12

Released By: \_\_\_\_\_

Print: \_\_\_\_\_

Sign: \_\_\_\_\_

Date: \_\_\_\_\_

Released By: \_\_\_\_\_

Print: Helen Machinery

Sign: Helen Machinery

Date: 11-21-12

Released To: \_\_\_\_\_

Print: \_\_\_\_\_

Sign: \_\_\_\_\_

Date: \_\_\_\_\_

Released To: \_\_\_\_\_

Released Totaly

Print: Muller

Sign: Paul Muller

Date: 11-21-12

Time: 1324

5.82

72

Notes: Please analyze all Systems checked for all analyses listed. NS=Not Sampled (system wasn't discharging)

5.807c

## Login Sample Receipt Checklist

Client: Environmental Technical Services

Job Number: 720-46158-2

Login Number: 46158

List Source: TestAmerica Pleasanton

List Number: 1

Creator: Bullock, Tracy

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	False	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	False	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	False	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



Helen Mawhinney  
Environmental Technical Services  
1548 Jacob Ave.  
San Jose, California 95118  
Tel: 510 385 4308/408 267 9729  
Email: hmawhinneyets@aol.com  
RE: LRT SW ANNUAL

Work Order No.: 1211219

Dear Helen Mawhinney:

Torrent Laboratory, Inc. received 1 sample(s) on November 29, 2012 for the analyses presented in the following Report.

All data for associated QC met EPA or laboratory specification(s) except where noted in the case narrative.

Torrent Laboratory, Inc. is certified by the State of California, ELAP #1991. If you have any questions regarding these test results, please feel free to contact the Project Management Team at (408)263-5258; ext 204.

A handwritten signature in blue ink, appearing to read "Janice Winn-Shilling", is positioned above a horizontal line.

Janice Winn-Shilling  
Sr. Project Manager

December 13, 2012

Date



**Date:** 12/13/2012

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**Client:** Environmental Technical Services

**Project:** LRT SW ANNUAL

**Work Order:** 1211219

### **CASE NARRATIVE**

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No issues encountered with the receiving, preparation, analysis or reporting of the results associated with this work order.

Unless otherwise indicated in the following narrative, no results have been method and/or field blank corrected.

Reported results relate only to the items/samples tested by the laboratory.

Preliminary report was issued for EPA 8081 data (submitted on a 24 hour TaT).



## Sample Result Summary

Report prepared for: Helen Mawhinney  
Environmental Technical Services

Date Received: 11/29/12

Date Reported: 12/13/12

SW-4

1211219-001

<u>Parameters:</u>	<u>Analysis Method</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Results</u>	<u>Unit</u>
Specific Conductance	E120.1	1	1	2.0	380	umhos/cm
Total Suspended Solids	E160.2	1	1	10	190	mg/L
pH	SM4500HB	1	0.10	2.00	8.13	S.U.
Total Organic Carbon	E415.1	1	0.30	0.50	2.5	mg/L
TPH as Motor Oil	SW8015B(M)	1	0.0900	0.40	2.9	mg/L
Iron	E200.7	1	0.002	0.10	2.1	mg/L
Aluminum	E200.7	1	0.004	0.30	0.60	mg/L
Lead	E200.7	1	0.005	0.015	0.016	mg/L
Vanadium	E200.7	1	0.004	0.010	0.077	mg/L
Zinc	E200.7	1	0.002	0.010	0.097	mg/L
Aldrin	SW8081A	25	0.0680	0.500	0.081	ug/L
Endrin	SW8081A	25	0.0278	0.500	0.056	ug/L



## SAMPLE RESULTS

Report prepared for: Helen Mawhinney  
Environmental Technical Services

Date Received: 11/29/12

Date Reported: 12/13/12

Client Sample ID:	SW-4	Lab Sample ID:	1211219-001A
Project Name/Location:	LRT SW ANNUAL	Sample Matrix:	Storm Water
Project Number:			
Date/Time Sampled:	11/28/12 / 14:30		
Tag Number:	LRT SW ANNUAL		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
Specific Conductance	E120.1	NA	11/29/12	1	1	2.0	380		umhos/cm	412989	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
pH	SM4500HB	NA	11/29/12	1	0.10	2.00	8.13		S.U.	412994	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
Total Suspended Solids	E160.2	NA	11/29/12	1	1	10	190		mg/L	412981	NA



## SAMPLE RESULTS

**Report prepared for:** Helen Mawhinney  
Environmental Technical Services

**Date Received:** 11/29/12  
**Date Reported:** 12/13/12

<b>Client Sample ID:</b>	SW-4	<b>Lab Sample ID:</b>	1211219-001B
<b>Project Name/Location:</b>	LRT SW ANNUAL	<b>Sample Matrix:</b>	Storm Water
<b>Project Number:</b>			
<b>Date/Time Sampled:</b>	11/28/12 / 14:30		
<b>Tag Number:</b>	LRT SW ANNUAL		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
Total Organic Carbon	E415.1	NA	12/10/12	1	0.30	0.50	2.5		mg/L	412983	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
MTBE	SW8260B	NA	11/30/12	1	0.17	0.50	ND		ug/L	412824	NA
Benzene	SW8260B	NA	11/30/12	1	0.087	0.50	ND		ug/L	412824	NA
Toluene	SW8260B	NA	11/30/12	1	0.059	0.50	ND		ug/L	412824	NA
Ethyl Benzene	SW8260B	NA	11/30/12	1	0.074	0.50	ND		ug/L	412824	NA
m,p-Xylene	SW8260B	NA	11/30/12	1	0.13	1.0	ND		ug/L	412824	NA
o-Xylene	SW8260B	NA	11/30/12	1	0.076	0.50	ND		ug/L	412824	NA
(S) Dibromofluoromethane	SW8260B	NA	11/30/12	1	61.2	131	98.1		%	412824	NA
(S) Toluene-d8	SW8260B	NA	11/30/12	1	75.1	127	79.7		%	412824	NA
(S) 4-Bromofluorobenzene	SW8260B	NA	11/30/12	1	64.1	120	78.1		%	412824	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH(Gasoline)	8260TPH	NA	11/30/12	1	31	50	ND		ug/L	412834	NA
(S) 4-Bromofluorobenzene	8260TPH	NA	11/30/12	1	41.5	125	47.4		%	412834	NA





## SAMPLE RESULTS

Report prepared for: Helen Mawhinney  
Environmental Technical Services

Date Received: 11/29/12

Date Reported: 12/13/12

Client Sample ID:	SW-4	Lab Sample ID:	1211219-001C
Project Name/Location:	LRT SW ANNUAL	Sample Matrix:	Storm Water
Project Number:			
Date/Time Sampled:	11/28/12 / 14:30		
Tag Number:	LRT SW ANNUAL		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
Total Oil and Grease	E1664A	11/30/12	12/03/12	1	1.0	5.0	ND		mg/L	412828	7284

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH as Motor Oil	SW8015B(M)	12/3/12	12/04/12	1	0.0900	0.40	2.9	x	mg/L	412876	7296
Pentacosane (S)	SW8015B(M)	12/3/12	12/04/12	1	64.2	123	89.4		%	412876	7296

**NOTE:** x-Not typical of TPH as Diesel or TPH as Motor Oil standard (possibly waste oil) Hydrocarbons from C10 - C22 quantitated as Diesel. Hydrocarbons from C23 - C40 quantitated as Motor Oil.



## SAMPLE RESULTS

Report prepared for: Helen Mawhinney  
Environmental Technical Services

Date Received: 11/29/12

Date Reported: 12/13/12

Client Sample ID:	SW-4	Lab Sample ID:	1211219-001D
Project Name/Location:	LRT SW ANNUAL	Sample Matrix:	Storm Water
Project Number:			
Date/Time Sampled:	11/28/12 / 14:30		
Tag Number:	LRT SW ANNUAL		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
COD	H8000	11/29/12	11/29/12	1	8.0	20	ND		mg/L	412833	7289



## SAMPLE RESULTS

Report prepared for: Helen Mawhinney  
Environmental Technical Services

Date Received: 11/29/12  
Date Reported: 12/13/12

Client Sample ID:	SW-4	Lab Sample ID:	1211219-001E
Project Name/Location:	LRT SW ANNUAL	Sample Matrix:	Storm Water
Project Number:			
Date/Time Sampled:	11/28/12 / 14:30		
Tag Number:	LRT SW ANNUAL		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
Iron	E200.7	12/3/12	12/04/12	1	0.002	0.10	2.1		mg/L	412856	7300
Aluminum	E200.7	12/3/12	12/04/12	1	0.004	0.30	0.60		mg/L	412856	7300
Copper	E200.7	12/3/12	12/04/12	1	0.003	0.010	ND		mg/L	412856	7300
Lead	E200.7	12/3/12	12/04/12	1	0.005	0.015	0.016		mg/L	412856	7300
Vanadium	E200.7	12/3/12	12/04/12	1	0.004	0.010	0.077		mg/L	412856	7300
Zinc	E200.7	12/3/12	12/04/12	1	0.002	0.010	0.097		mg/L	412856	7300



## SAMPLE RESULTS

**Report prepared for:** Helen Mawhinney  
Environmental Technical Services

**Date Received:** 11/29/12  
**Date Reported:** 12/13/12

<b>Client Sample ID:</b>	SW-4	<b>Lab Sample ID:</b>	1211219-001F
<b>Project Name/Location:</b>	LRT SW ANNUAL	<b>Sample Matrix:</b>	Storm Water
<b>Project Number:</b>			
<b>Date/Time Sampled:</b>	11/28/12 / 14:30		
<b>Tag Number:</b>	LRT SW ANNUAL		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
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*The results shown below are reported using their MDL.*

alpha-BHC	SW8081A	11/29/12	11/29/12	25	0.0838	0.500	ND		ug/L	412798	7272
gamma-BHC	SW8081A	11/29/12	11/29/12	25	0.0671	0.500	ND		ug/L	412798	7272
beta-BHC	SW8081A	11/29/12	11/29/12	25	0.0629	0.500	ND		ug/L	412798	7272
delta-BHC	SW8081A	11/29/12	11/29/12	25	0.0549	0.500	ND		ug/L	412798	7272
Heptachlor	SW8081A	11/29/12	11/29/12	25	0.0621	0.500	ND		ug/L	412798	7272
Aldrin	SW8081A	11/29/12	11/29/12	25	0.0680	0.500	0.081	J	ug/L	412798	7272
Heptachlor epoxide	SW8081A	11/29/12	11/29/12	25	0.0375	0.500	ND		ug/L	412798	7272
gamma-Chlordane	SW8081A	11/29/12	11/29/12	25	0.0804	0.500	ND		ug/L	412798	7272
alpha-Chlordane	SW8081A	11/29/12	11/29/12	25	0.0309	0.500	ND		ug/L	412798	7272
Endosulfan I	SW8081A	11/29/12	11/29/12	25	0.122	0.500	ND		ug/L	412798	7272
4,4'-DDE	SW8081A	11/29/12	11/29/12	25	0.0309	0.500	ND		ug/L	412798	7272
Dieldrin	SW8081A	11/29/12	11/29/12	25	0.0454	0.500	ND		ug/L	412798	7272
Endrin	SW8081A	11/29/12	11/29/12	25	0.0278	0.500	0.056	J	ug/L	412798	7272
4,4'-DDD	SW8081A	11/29/12	11/29/12	25	0.0273	0.500	ND		ug/L	412798	7272
Endosulfan II	SW8081A	11/29/12	11/29/12	25	0.0380	0.500	ND		ug/L	412798	7272
4,4'-DDT	SW8081A	11/29/12	11/29/12	25	0.0716	0.500	ND		ug/L	412798	7272
Endrin aldehyde	SW8081A	11/29/12	11/29/12	25	0.145	0.500	ND		ug/L	412798	7272
Endosulfan sulfate	SW8081A	11/29/12	11/29/12	25	0.0405	0.500	ND		ug/L	412798	7272
Methoxychlor	SW8081A	11/29/12	11/29/12	25	0.164	1.25	ND		ug/L	412798	7272
Endrin Ketone	SW8081A	11/29/12	11/29/12	25	0.0839	0.500	ND		ug/L	412798	7272
Chlordane	SW8081A	11/29/12	11/29/12	25	3.3	6.25	ND		ug/L	412798	7272
Toxaphene	SW8081A	11/29/12	11/29/12	25	7.8	30	ND		ug/L	412798	7272
TCMX (S)	SW8081A	11/29/12	11/29/12	25	40.3	118	0.000	D	%	412798	7272
DCBP (S)	SW8081A	11/29/12	11/29/12	25	52	116	0.000	D	%	412798	7272

**NOTE:** Reporting limits increased due to the nature of the sample matrix (dark color extract).



## MB Summary Report

<b>Work Order:</b>	1211219	<b>Prep Method:</b>	NA	<b>Prep Date:</b>	NA	<b>Prep Batch:</b>	NA
<b>Matrix:</b>	Water	<b>Analytical Method:</b>	SW8260B	<b>Analyzed Date:</b>	11/30/12	<b>Analytical Batch:</b>	412824
<b>Units:</b>	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier
Dichlorodifluoromethane	0.18	0.50	ND	
Chloromethane	0.16	0.50	ND	
Vinyl Chloride	0.16	0.50	ND	
Bromomethane	0.18	0.50	ND	
Trichlorofluoromethane	0.18	0.50	ND	
1,1-Dichloroethene	0.15	0.50	ND	
Freon 113	0.19	0.50	ND	
Methylene Chloride	0.23	5.0	ND	
trans-1,2-Dichloroethene	0.19	0.50	ND	
MTBE	0.17	0.50	ND	
tert-Butanol	1.5	5.0	ND	
Diisopropyl ether (DIPE)	0.13	0.50	ND	
1,1-Dichloroethane	0.13	0.50	ND	
ETBE	0.17	0.50	ND	
cis-1,2-Dichloroethene	0.19	0.50	ND	
2,2-Dichloropropane	0.15	0.50	ND	
Bromochloromethane	0.20	0.50	ND	
Chloroform	0.13	0.50	ND	
Carbon Tetrachloride	0.15	0.50	ND	
1,1,1-Trichloroethane	0.097	0.50	ND	
1,1-Dichloropropene	0.15	0.50	ND	
Benzene	0.13	0.50	ND	
TAME	0.17	0.50	ND	
1,2-Dichloroethane	0.14	0.50	ND	
Trichloroethylene	0.13	0.50	ND	
Dibromomethane	0.15	0.50	ND	
1,2-Dichloropropane	0.17	0.50	ND	
Bromodichloromethane	0.13	0.50	ND	
cis-1,3-Dichloropropene	0.096	0.50	ND	
Toluene	0.14	0.50	ND	
Tetrachloroethylene	0.14	0.50	ND	
trans-1,3-Dichloropropene	0.23	0.50	ND	
1,1,2-Trichloroethane	0.14	0.50	ND	
Dibromochloromethane	0.096	0.50	ND	
1,3-Dichloropropane	0.10	0.50	ND	
1,2-Dibromoethane	0.19	0.50	ND	
Chlorobenzene	0.14	0.50	ND	
Ethyl Benzene	0.15	0.50	ND	
1,1,1,2-Tetrachloroethane	0.096	0.50	ND	
m,p-Xylene	0.13	1.0	ND	



## MB Summary Report

<b>Work Order:</b>	1211219	<b>Prep Method:</b>	NA	<b>Prep Date:</b>	NA	<b>Prep Batch:</b>	NA
<b>Matrix:</b>	Water	<b>Analytical Method:</b>	SW8260B	<b>Analyzed Date:</b>	11/30/12	<b>Analytical Batch:</b>	412824
<b>Units:</b>	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
o-Xylene	0.15	0.50	ND		
Styrene	0.21	0.50	ND		
Bromoform	0.21	1.0	ND		
Isopropyl Benzene	0.097	0.50	ND		
Bromobenzene	0.15	0.50	ND		
1,1,2,2-Tetrachloroethane	0.11	0.50	ND		
n-Propylbenzene	0.078	0.50	ND		
2-Chlorotoluene	0.076	0.50	ND		
1,3,5,-Trimethylbenzene	0.074	0.50	ND		
4-Chlorotoluene	0.088	0.50	ND		
tert-Butylbenzene	0.081	0.50	ND		
1,2,3-Trichloropropane	0.14	0.50	ND		
1,2,4-Trimethylbenzene	0.083	0.50	ND		
sec-Butyl Benzene	0.092	0.50	ND		
p-Isopropyltoluene	0.093	0.50	ND		
1,3-Dichlorobenzene	0.10	0.50	ND		
1,4-Dichlorobenzene	0.069	0.50	ND		
n-Butylbenzene	0.081	0.50	ND		
1,2-Dichlorobenzene	0.057	0.50	ND		
1,2-Dibromo-3-Chloropropane	0.15	0.50	ND		
Hexachlorobutadiene	0.19	0.50	ND		
1,2,4-Trichlorobenzene	0.12	0.50	ND		
Naphthalene	0.14	1.0	ND		
1,2,3-Trichlorobenzene	0.23	0.50	ND		
(S) Dibromofluoromethane			95.7		
(S) Toluene-d8			83.7		
(S) 4-Bromofluorobenzene			78.2		
Ethanol	0.21	0.50	ND	TIC	

<b>Work Order:</b>	1211219	<b>Prep Method:</b>	NA	<b>Prep Date:</b>	NA	<b>Prep Batch:</b>	NA
<b>Matrix:</b>	Water	<b>Analytical Method:</b>	8260TPH	<b>Analyzed Date:</b>	11/30/12	<b>Analytical Batch:</b>	412834
<b>Units:</b>	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
TPH(Gasoline)	31	50	ND		
(S) 4-Bromofluorobenzene			50.3		



## MB Summary Report

<b>Work Order:</b>	1211219	<b>Prep Method:</b>	NA	<b>Prep Date:</b>	NA	<b>Prep Batch:</b>	NA
<b>Matrix:</b>	Water	<b>Analytical Method:</b>	E160.2	<b>Analyzed Date:</b>	11/29/12	<b>Analytical Batch:</b>	412981
<b>Units:</b>	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
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Total Suspended Solids                      1                      10                      ND

<b>Work Order:</b>	1211219	<b>Prep Method:</b>	NA	<b>Prep Date:</b>	NA	<b>Prep Batch:</b>	NA
<b>Matrix:</b>	Water	<b>Analytical Method:</b>	E415.1	<b>Analyzed Date:</b>	12/10/12	<b>Analytical Batch:</b>	412983
<b>Units:</b>	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
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Total Organic Carbon                      0.31                      0.50                      ND

<b>Work Order:</b>	1211219	<b>Prep Method:</b>	NA	<b>Prep Date:</b>	NA	<b>Prep Batch:</b>	NA
<b>Matrix:</b>	Water	<b>Analytical Method:</b>	E120.1	<b>Analyzed Date:</b>	11/29/12	<b>Analytical Batch:</b>	412989
<b>Units:</b>	umhos/cm						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
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Specific Conductance                      1                      2.0                      ND





## MB Summary Report

<b>Work Order:</b>	1211219	<b>Prep Method:</b>	3510_OCP	<b>Prep Date:</b>	11/29/12	<b>Prep Batch:</b>	7272
<b>Matrix:</b>	Water	<b>Analytical Method:</b>	SW8081A	<b>Analyzed Date:</b>	11/29/12	<b>Analytical Batch:</b>	412798
<b>Units:</b>	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier
alpha-BHC	0.00336	0.0200	ND	
gamma-BHC	0.00266	0.0200	ND	
beta-BHC	0.00252	0.0200	ND	
delta-BHC	0.00220	0.0200	ND	
Heptachlor	0.00249	0.0200	ND	
Aldrin	0.00272	0.0200	ND	
Heptachlor epoxide	0.00150	0.0200	ND	
gamma-Chlordane	0.00322	0.0200	ND	
alpha-Chlordane	0.00227	0.0200	ND	
Endosulfan I	0.00486	0.0200	ND	
4,4'-DDE	0.00124	0.0200	ND	
Dieldrin	0.00182	0.0200	ND	
Endrin	0.00111	0.0200	0.0022	
4,4'-DDD	0.00109	0.0200	ND	
Endosulfan II	0.00152	0.0200	ND	
4,4'-DDT	0.00287	0.0200	ND	
Endrin aldehyde	0.00580	0.0200	ND	
Endosulfan sulfate	0.00162	0.0200	ND	
Methoxychlor	0.00658	0.0500	ND	
Endrin Ketone	0.00336	0.0200	ND	
Chlordane	0.13	0.250	ND	
Toxaphene	0.31	1	ND	
TCMX (S)			80.1	
DCBP (S)			97.8	

<b>Work Order:</b>	1211219	<b>Prep Method:</b>	1664A	<b>Prep Date:</b>	11/30/12	<b>Prep Batch:</b>	7284
<b>Matrix:</b>	Water	<b>Analytical Method:</b>	E1664A	<b>Analyzed Date:</b>	11/30/12	<b>Analytical Batch:</b>	412825
<b>Units:</b>	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier
Total Oil and Grease	1.0	5.0	1	



## MB Summary Report

<b>Work Order:</b>	1211219	<b>Prep Method:</b>	H8000	<b>Prep Date:</b>	11/29/12	<b>Prep Batch:</b>	7289
<b>Matrix:</b>	Water	<b>Analytical Method:</b>	H8000	<b>Analyzed Date:</b>	11/29/12	<b>Analytical Batch:</b>	412833
<b>Units:</b>	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
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COD 8.0 20 ND

<b>Work Order:</b>	1211219	<b>Prep Method:</b>	3510_TPH	<b>Prep Date:</b>	12/03/12	<b>Prep Batch:</b>	7296
<b>Matrix:</b>	Water	<b>Analytical Method:</b>	SW8015B(M)	<b>Analyzed Date:</b>	12/03/12	<b>Analytical Batch:</b>	412854
<b>Units:</b>	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
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TPH as Diesel 0.0440 0.10 ND  
TPH as Motor Oil 0.0920 0.40 0.095  
Pentacosane (S) 88.2

<b>Work Order:</b>	1211219	<b>Prep Method:</b>	200.7	<b>Prep Date:</b>	12/03/12	<b>Prep Batch:</b>	7300
<b>Matrix:</b>	Water	<b>Analytical Method:</b>	E200.7	<b>Analyzed Date:</b>	12/04/12	<b>Analytical Batch:</b>	412856
<b>Units:</b>	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
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Iron 0.002 0.10 0.0096  
Aluminum 0.004 0.30 0.10  
Copper 0.003 0.010 ND  
Lead 0.005 0.015 ND  
Nickel 0.002 0.010 ND  
Vanadium 0.004 0.010 ND  
Zinc 0.002 0.010 ND  
Silica 0.05 0.20 ND



## MB Summary Report

<b>Work Order:</b>	1211219	<b>Prep Method:</b>	3510_TPHSG	<b>Prep Date:</b>	12/04/12	<b>Prep Batch:</b>	7314
<b>Matrix:</b>	Water	<b>Analytical Method:</b>	SW8015B(M)	<b>Analyzed Date:</b>	12/04/12	<b>Analytical Batch:</b>	412876
<b>Units:</b>	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
TPH as Diesel (SG)	0.0440	0.10	0.046		
TPH as Motor Oil (SG)	0.0920	0.40	0.11		
Pentacosane (S)			99.7		



## LCS/LCSD Summary Report

Raw values are used in quality control assessment.

<b>Work Order:</b>	1211219	<b>Prep Method:</b>	NA	<b>Prep Date:</b>	NA	<b>Prep Batch:</b>	NA
<b>Matrix:</b>	Water	<b>Analytical Method:</b>	SW8260B	<b>Analyzed Date:</b>	11/30/12	<b>Analytical Batch:</b>	412824
<b>Units:</b>	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
1,1-Dichloroethene	0.14	0.50	ND	17.04	116	108	6.86	61.4 - 129	30	
Benzene	0.087	0.50	ND	17.04	103	90.8	12.9	66.9 - 140	30	
Trichloroethylene	0.057	0.50	ND	17.04	118	106	11.6	69.3 - 144	30	
Toluene	0.059	0.50	ND	17.04	92.3	78.0	16.6	76.6 - 123	30	
Chlorobenzene	0.068	0.50	ND	17.04	95.0	81.6	15.2	73.9 - 137	30	
(S) Dibromofluoromethane			ND	17.04	103	93.1		61.2 - 131		
(S) Toluene-d8			ND	17.04	89.4	81.2		75.1 - 127		
(S) 4-Bromofluorobenzene			ND	17.04	85.5	73.8		64.1 - 120		

<b>Work Order:</b>	1211219	<b>Prep Method:</b>	NA	<b>Prep Date:</b>	NA	<b>Prep Batch:</b>	NA
<b>Matrix:</b>	Water	<b>Analytical Method:</b>	8260TPH	<b>Analyzed Date:</b>	11/30/12	<b>Analytical Batch:</b>	412834
<b>Units:</b>	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
TPH(Gasoline)	31	50	ND	227.27	102	98.8	2.98	52.4 - 127	30	
(S) 4-Bromofluorobenzene			50.3	11.36	54.7	55.6		41.5 - 125		

<b>Work Order:</b>	1211219	<b>Prep Method:</b>	NA	<b>Prep Date:</b>	NA	<b>Prep Batch:</b>	NA
<b>Matrix:</b>	Water	<b>Analytical Method:</b>	E415.1	<b>Analyzed Date:</b>	12/10/12	<b>Analytical Batch:</b>	412983
<b>Units:</b>	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
Total Organic Carbon	0.31	0.50	ND	10	96.4	97.4	1.03	80 - 120	20	



## LCS/LCSD Summary Report

Raw values are used in quality control assessment.

<b>Work Order:</b>	1211219	<b>Prep Method:</b>	3510_OCP	<b>Prep Date:</b>	11/29/12	<b>Prep Batch:</b>	7272
<b>Matrix:</b>	Water	<b>Analytical Method:</b>	SW8081A	<b>Analyzed Date:</b>	11/29/12	<b>Analytical Batch:</b>	412798
<b>Units:</b>	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
gamma-BHC	0.00266	0.0200	ND	0.1	83.8	85.0	1.37	61.6 - 135	30	
Heptachlor	0.00249	0.0200	ND	0.1	86.4	88.7	2.63	60 - 97.8	30	
Aldrin	0.00272	0.0200	ND	0.1	77.7	78.2	0.665	55.3 - 101	30	
Dieldrin	0.00182	0.0200	ND	0.1	85.3	87.6	2.74	60.3 - 116	30	
Endrin	0.00111	0.0200	ND	0.1	83.9	85.6	2.07	60.4 - 134	30	
4,4'-DDT	0.00287	0.0200	ND	0.1	88.0	89.2	1.40	58.4 - 126	30	
TCMX (S)			ND	350	77.8	78.3		40.3 - 118		
DCBP (S)			ND	350	83.4	83.9		52 - 116		

<b>Work Order:</b>	1211219	<b>Prep Method:</b>	1664A	<b>Prep Date:</b>	11/30/12	<b>Prep Batch:</b>	7284
<b>Matrix:</b>	Water	<b>Analytical Method:</b>	E1664A	<b>Analyzed Date:</b>	11/30/12	<b>Analytical Batch:</b>	412825
<b>Units:</b>	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
Total Oil and Grease	1.0	5.0	1	40	88.8	87.5	1.42	60 - 140	30	

<b>Work Order:</b>	1211219	<b>Prep Method:</b>	H8000	<b>Prep Date:</b>	11/29/12	<b>Prep Batch:</b>	7289
<b>Matrix:</b>	Water	<b>Analytical Method:</b>	H8000	<b>Analyzed Date:</b>	11/29/12	<b>Analytical Batch:</b>	412833
<b>Units:</b>	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
COD	8.0	20	ND	100	107	106	0.939	60 - 140	20	

<b>Work Order:</b>	1211219	<b>Prep Method:</b>	3510_TPH	<b>Prep Date:</b>	12/03/12	<b>Prep Batch:</b>	7296
<b>Matrix:</b>	Water	<b>Analytical Method:</b>	SW8015B(M)	<b>Analyzed Date:</b>	12/03/12	<b>Analytical Batch:</b>	412854
<b>Units:</b>	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
TPH as Diesel	0.0440	0.10	ND	1	90.1	77.3	15.3	50.3 - 125	30	
Pentacosane (S)			0.095	100	81.9	77.3		57.9 - 125		



## LCS/LCSD Summary Report

Raw values are used in quality control assessment.

<b>Work Order:</b>	1211219	<b>Prep Method:</b>	200.7	<b>Prep Date:</b>	12/03/12	<b>Prep Batch:</b>	7300
<b>Matrix:</b>	Water	<b>Analytical Method:</b>	E200.7	<b>Analyzed Date:</b>	12/04/12	<b>Analytical Batch:</b>	412856
<b>Units:</b>	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
Iron	0.002	0.10	0.0096	10	106	100	9.52	75 - 125	30	
Aluminum	0.004	0.30	0.10	10	106	99.5	9.98	75 - 125	30	
Copper	0.003	0.010	ND	1	104	100	3.53	80 - 120	30	
Lead	0.005	0.015	ND	1	102	99.4	2.93	80 - 120	30	
Nickel	0.002	0.010	ND	1	104	102	1.56	80 - 120	30	
Vanadium	0.004	0.010	ND	1	104	102	2.34	80 - 120	30	
Zinc	0.002	0.010	ND	1	103	103	0.000	80 - 120	30	
Silica	0.05	0.20	ND	1	102	99.6	2.64	80 - 120	30	

<b>Work Order:</b>	1211219	<b>Prep Method:</b>	3510_TPHSG	<b>Prep Date:</b>	12/04/12	<b>Prep Batch:</b>	7314
<b>Matrix:</b>	Water	<b>Analytical Method:</b>	SW8015B(M)	<b>Analyzed Date:</b>	12/04/12	<b>Analytical Batch:</b>	412876
<b>Units:</b>	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
TPH as Diesel (SG)	0.0440	0.10	0.046	1	58.8	52.8	10.8	36.5 - 91.3	30	
Pentacosane (S)			0.11	100	71.1	69.1		50.8 - 139		



## Duplicate QC Summary Report

Work Order:	1211219	Prep Method:	NA	Prep Date:	NA	Prep Batch:	NA
Matrix:	Water	Analytical Method:	E120.1	Analyzed Date:	11/29/12	Analytical Batch:	412989
Units:						Lab Sample ID:	1211193-001A-Dup

Parameters	<u>MDL</u>	<u>PQL</u>	<u>Sample Result</u>	<u>Duplicate Result</u>	<u>% RPD</u>	
Specific Conductance	1	2.0	31	31	0.647	

Work Order:	1211219	Prep Method:	NA	Prep Date:	NA	Prep Batch:	NA
Matrix:	Water	Analytical Method:	SM4500HB	Analyzed Date:	11/29/12	Analytical Batch:	412994
Units:						Lab Sample ID:	1211193-001A-Dup

Parameters	<u>MDL</u>	<u>PQL</u>	<u>Sample Result</u>	<u>Duplicate Result</u>	<u>% RPD</u>	
pH	0.10	2.00	7.52	7.47	0.667	

Work Order:	1211219	Prep Method:	NA	Prep Date:	NA	Prep Batch:	NA
Matrix:	Water	Analytical Method:	E160.2	Analyzed Date:	11/29/12	Analytical Batch:	412981
Units:						Lab Sample ID:	1211209-001A-Dup

Parameters	<u>MDL</u>	<u>PQL</u>	<u>Sample Result</u>	<u>Duplicate Result</u>	<u>% RPD</u>	
Total Suspended Solids	1	10	20.0	21	4.88	

Work Order:	1211219	Prep Method:	NA	Prep Date:	NA	Prep Batch:	NA
Matrix:	Water	Analytical Method:	E415.1	Analyzed Date:	12/10/12	Analytical Batch:	412983
Units:						Lab Sample ID:	1211239-001B-Dup

Parameters	<u>MDL</u>	<u>PQL</u>	<u>Sample Result</u>	<u>Duplicate Result</u>	<u>% RPD</u>	
Total Organic Carbon	0.30	0.50	0.24	0.22	8.70	

Raw values are used in quality control assessment.





## Laboratory Qualifiers and Definitions

### DEFINITIONS:

<b>Accuracy/Bias (% Recovery)</b> - The closeness of agreement between an observed value and an accepted reference value.
<b>Blank (Method/Preparation Blank)</b> -MB/PB - An analyte-free matrix to which all reagents are added in the same volumes/proportions as used in sample processing. The method blank is used to document contamination resulting from the analytical process.
<b>Duplicate</b> - a field sample and/or laboratory QC sample prepared in duplicate following all of the same processes and procedures used on the original sample (sample duplicate, LCSD, MSD)
<b>Laboratory Control Sample (LCS ad LCSD)</b> - A known matrix spiked with compounds representative of the target analyte(s). This is used to document laboratory performance.
<b>Matrix</b> - the component or substrate that contains the analyte of interest (e.g., - groundwater, sediment, soil, waste water, etc)
<b>Matrix Spike (MS/MSD)</b> - Client sample spiked with identical concentrations of target analyte (s). The spiking occurs prior to the sample preparation and analysis. They are used to document the precision and bias of a method in a given sample matrix.
<b>Method Detection Limit (MDL)</b> - the minimum concentration of a substance that can be measured and reported with a 99% confidence that the analyte concentration is greater than zero
<b>Practical Quantitation Limit (PQL)</b> - a laboratory determined value at 2 to 5 times above the MDL that can be reproduced in a manner that results in a 99% confidence level that the result is both accurate and precise. PQLs reflect all preparation factors and/or dilution factors that have been applied to the sample during the preparation and/or analytical processes.
<b>Precision (%RPD)</b> - The agreement among a set of replicate/duplicate measurements without regard to known value of the replicates
<b>Surrogate (S) or (Surr)</b> - An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples. Surrogates are used in most organic analysis to demonstrate matrix compatibility with the chosen method of analysis
<b>Tentatively Identified Compound (TIC)</b> - A compound not contained within the analytical calibration standards but present in the GCMS library of defined compounds. When the library is searched for an unknown compound, it can frequently give a tentative identification to the compound based on retention time and primary and secondary ion match. TICs are reported as estimates and are candidates for further investigation.
<b>Units:</b> the unit of measure used to express the reported result - <b>mg/L</b> and <b>mg/Kg</b> (equivalent to PPM - parts per million in <b>liquid</b> and <b>solid</b> ), <b>ug/L</b> and <b>ug/Kg</b> (equivalent to PPB - parts per billion in <b>liquid</b> and <b>solid</b> ), <b>ug/m3</b> , <b>mg.m3</b> , <b>ppbv</b> and <b>ppmv</b> (all units of measure for reporting concentrations in air), % (equivalent to 10000 ppm or 1,000,000 ppb), <b>ug/Wipe</b> ( concentration found on the surface of a single Wipe usually taken over a 100cm2 surface)

### LABORATORY QUALIFIERS:

<b>B</b> - Indicates when the analyte is found in the associated method or preparation blank
<b>D</b> - Surrogate is not recoverable due to the necessary dilution of the sample
<b>E</b> - Indicates the reportable value is outside of the calibration range of the instrument but within the linear range of the instrument (unless otherwise noted) Values reported with an E qualifier should be considered as estimated.
<b>H</b> - Indicates that the recommended holding time for the analyte or compound has been exceeded
<b>J</b> - Indicates a value between the method MDL and PQL and that the reported concentration should be considered as estimated rather the quantitative
<b>NA</b> - Not Analyzed
<b>N/A</b> - Not Applicable
<b>NR</b> - Not recoverable - a matrix spike concentration is not recoverable due to a concentration within the original sample that is greater than four times the spike concentration added
<b>R</b> - The % RPD between a duplicate set of samples is outside of the absolute values established by laboratory control charts
<b>S</b> - Spike recovery is outside of established method and/or laboratory control limits. Further explanation of the use of this qualifier should be included within a case narrative
<b>X</b> -Used to indicate that a value based on pattern identification is within the pattern range but not typical of the pattern found in standards. Further explanation may or may not be provided within the sample footnote and/or the case narrative.



## Sample Receipt Checklist

Client Name: Environmental Technical Services

Date and Time Received: 11/29/2012 12:30

Project Name: LRT SW ANNUAL

Received By: ng

Work Order No.: 1211219

Physically Logged By: ng

Checklist Completed By: ng

Carrier Name: Hi-Speed Courier

### Chain of Custody (COC) Information

Chain of custody present? Yes

Chain of custody signed when relinquished and received? Yes

Chain of custody agrees with sample labels? Yes

Custody seals intact on sample bottles? Not Present

### Sample Receipt Information

Custody seals intact on shipping container/cooler? Not Present

Shipping Container/Cooler In Good Condition? Yes

Samples in proper container/bottle? Yes

Samples containers intact? Yes

Sufficient sample volume for indicated test? Yes

### Sample Preservation and Hold Time (HT) Information

All samples received within holding time? Yes

Container/Temp Blank temperature in compliance? Yes

Temperature: 2 °C

Water-VOA vials have zero headspace? Yes

Water-pH acceptable upon receipt? Yes

pH Checked by: ng

pH Adjusted by: no



## Login Summary Report

**Client ID:** TL5744 Environmental Technical Services **QC Level:**

**Project Name:** LRT SW ANNUAL **TAT Requested:** 2 day:50

**Project # :** **Date Received:** 11/29/2012

**Report Due Date:** 12/13/2012 **Time Received:** 12:30

**Comments:** This proj recd from Environmental Technical Services, 1548 Jacob Ave., San Jose, CA 95118. Contact: R.A. Lester.

RUSH 2-Day only for 8081 test!!!!!! Rest of the tests std TAT of stormwater- this needs to be confirmed with client. Recd. 2, 1 lit. HCl. preserved ambers and only 1, 1lit. amber (for 8081 and TPHDO test). Need to notify client.

Prelims send 8081A 12/3/12 JWS

**Work Order # :** **1211219**

<u>WO Sample ID</u>	<u>Client Sample ID</u>	<u>Collection Date/Time</u>	<u>Matrix</u>	<u>Scheduled Disposal</u>	<u>Sample On Hold</u>	<u>Test On Hold</u>	<u>Requested Tests</u>	<u>Subbed</u>
1211219-001A	SW-4	11/28/12 14:30	Water	01/13/13			W_TSS_160.2 W_pH_SM4500-H+ B W_120.1 Cond	
1211219-001B	SW-4	11/28/12 14:30	Water	01/13/13			W_415.1TOC W_GCMS-GRO W_8260MBTEX	
1211219-001C	SW-4	11/28/12 14:30	Water	01/13/13			W_TOG1664A W_TPHDO	
1211219-001D	SW-4	11/28/12 14:30	Water	01/13/13			W_COD	
1211219-001E	SW-4	11/28/12 14:30	Water	01/13/13			W_200.7Master	
<b><u>Sample Note:</u></b>	Metals: Al, Cu, Fe, Pb, Zn and V(?). Please confirm for "V".							
1211219-001F	SW-4	11/28/12 14:30	Water	01/13/13			W_8081A_OCP	
<b><u>Sample Note:</u></b>	RUSH 2-Day only for 8081 test!!!!!!							



1211219

CHAIN OF CUSTODY/ANALYSES REQUESTED						ANNUAL STORMWATER SAMPLES							
Environmental Technical Services 1548 Jacob Avenue San Jose, California 95118				PO. NO. (required) TL Project Name: LRT SW ANNUAL				<b>MUST ANALYZE USING 40 CFR 136 METHODS</b>					
CLIENT ID	CHK BY SYSTEMS TO BE ANALYZED	DATE	TIME	LAB ID NO	PH + TSS	SPEC COND	TPHG BTEX MTbE 8260	TOG 1664	COD	TTL METALS AL, CU, FE, PB, ZN, VN 8081	TOC	TEPH MO	
SW-1													
SW-2													
SW-3													
SW-4	X	11/28/12	1430		X	X	X	X	X	X	X	X	
SW-5													
SW-6													
SW-7													
S PARR SW-10													
S PARR SW-11													
N PARR SW-12													
Sampled/Released By: Print: <u>R.A. LESTER</u> Sign: <u>RA. LESTER</u> Date: <u>11.28.12</u> Time: _____						Released To: <u>LRT FRIDGE</u> Print: <u>R.A. LESTER</u> Sign: <u>RA. LESTER</u> Date: <u>11.28.12</u> Time: <u>1630</u>							
Released To: Print: <u>Helen Mawhinney</u> Sign: <u>Helen Mawhinney</u> Date: <u>11.28.12</u> Time: <u>1636</u>						Released To: <u>Helen Mawhinney</u> Print: <u>Helen Mawhinney</u> Sign: <u>Helen Mawhinney</u> Date: _____ Time: _____							
Released By: Print: <u>Natalie Brown</u> Sign: <u>Natalie Brown</u> Date: <u>11/29/12</u> Time: <u>12:30pm</u>						Released To: Print: <u>NAVIN R.</u> Sign: <u>M. G. Chodasara</u> Date: <u>11-29-12</u> Time: <u>12:30 P.M.</u>							
Notes: Please analyze all Systems checked for all analyses listed. NS=Not Sampled (system wasn't discharging)													

**RUSH  
2 DAYS**

For 8081  
Test only

Temp 20

01/18/12/10/11/12

Hispeed

Log-in 11-29-12





# REQUEST FORM



## Project Details

☐ Same Day (2-8 Hours)    ☐ One Day   
 ☐ Noon    ☒ 2 Day   
 ☐ Noon    ☐ 3 Day   
 ☐ Noon    ☐ 4 Day   
 ☐ Noon

Matrix | Water  
(i.e., sample type: Is your sample soil, water, etc?)

Analysis | TSS, SC, TPHG, MBTEX, TOG, COD, Metals (Al, Cu, Fe, Pb, Zn, V), OCPs, TOC, TPHMO

☐ Weekend work required (refer to chart below for respective surcharge)

This request form may be a courtesy notice which reflects the rush services requested on the chain-of-custody. Please contact *Torrent Express*<sup>SM</sup> project management immediately at [pm@torrentlab.com](mailto:pm@torrentlab.com) with the subject line "Rush TAT Cancellation" if you do not want the analysis(es) to proceed. Cancellation of a *Torrent Express*<sup>SM</sup> service may be subject to a cancellation fee.

In order to facilitate processing and scheduling, please notify Torrent Laboratory at least 24 hours in advance for any *Torrent Express™* service. Sample(s) must be received or scheduled for pick-up before 5:00 pm in order to be processed that day; all samples received after 5:00 pm will be processed the following day.

All *Torrent Express*™ Same Day and Next Day rush services will be charged a \$250.00 minimum (excluding certain fees) plus the respective surcharge(s); all other *Torrent Express*™ rush services will be charged a \$150.00 minimum (excluding certain fees) plus the respective surcharge(s).

The following table briefly describes Torrent Laboratory's *Torrent Express*™ surcharge pricing structure, please refer to your company specific price list for the precise surcharges.

	Same Day	Next Day*	2 Day*	3 Day*	4 Day*
Regular Rush	300%	150%	75%	50%	37.5%
Noon	—	200%	100%	62.5%	50%
Weekend	300%	300%	—	—	—

\*business day(s)

Confirmation Number | 

## For Torrent Lab Use Only

Project Name | XXXXXXXXXXXXXXXXXX  
Project Number | XXXXXXXXXXXXXXXXXX  
Order ID | 1211223  
Order Taken By | XXXXXXXXXXXXXXXXXX  
Accounting | \_\_\_\_\_



Helen Mawhinney  
Environmental Technical Services  
1548 Jacob Ave.  
San Jose, California 95118  
Tel: 510 385 4308/408 267 9729  
Email: hmawhinneyets@aol.com  
RE: LRT SW Annual 11/30/12

Work Order No.: 1211237

Dear Helen Mawhinney:

Torrent Laboratory, Inc. received 9 sample(s) on November 30, 2012 for the analyses presented in the following Report.

All data for associated QC met EPA or laboratory specification(s) except where noted in the case narrative.

Torrent Laboratory, Inc. is certified by the State of California, ELAP #1991. If you have any questions regarding these test results, please feel free to contact the Project Management Team at (408)263-5258; ext 204.

A handwritten signature in blue ink, appearing to read "Patti Sandrock", is positioned above a horizontal line.

---

Patti Sandrock  
QA Officer

December 17, 2012

---

Date



**Date:** 12/17/2012

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**Client:** Environmental Technical Services

**Project:** LRT SW Annual 11/30/12

**Work Order:** 1211237

### **CASE NARRATIVE**

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No issues encountered with the receiving, preparation, analysis or reporting of the results associated with this work order.

Unless otherwise indicated in the following narrative, no results have been method and/or field blank corrected.

Reported results relate only to the items/samples tested by the laboratory.

Analytical Comments for method W\_200.7, MS/MSD, Note: The % recoveries for Iron and Aluminum are outside of laboratory control limits but % RPD is within limits. The associated LCS/LCSD is within both % Recovery and %RPD limits. No corrective action required.





## Sample Result Summary

Report prepared for: Helen Mawhinney  
Environmental Technical Services

Date Received: 11/30/12

Date Reported: 12/17/12

SW-1

1211237-001

<u>Parameters:</u>	<u>Analysis Method</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Results</u>	<u>Unit</u>
Specific Conductance	E120.1	1	1	2.0	48	umhos/cm
Total Suspended Solids	E160.2	1	0.1	1	120	mg/L
pH	SM4500HB	1	0.10	2.00	7.43	S.U.
Total Organic Carbon	E415.1	1	0.30	0.50	1.1	mg/L
TPH as Motor Oil	SW8015B(M)	1	0.0900	0.40	0.44	mg/L
Iron	E200.7	1	0.002	0.10	0.59	mg/L
Zinc	E200.7	1	0.002	0.010	0.12	mg/L



## Sample Result Summary

Report prepared for: Helen Mawhinney  
Environmental Technical Services

Date Received: 11/30/12

Date Reported: 12/17/12

1211237-002

SW-2

<u>Parameters:</u>	<u>Analysis Method</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Results</u>	<u>Unit</u>
Specific Conductance	E120.1	1	1	2.0	220	umhos/cm
Total Suspended Solids	E160.2	1	0.5	5	180	mg/L
pH	SM4500HB	1	0.10	2.00	8.08	S.U.
Total Organic Carbon	E415.1	1	0.30	0.50	1.2	mg/L
TPH as Motor Oil	SW8015B(M)	1	0.0900	0.40	1.6	mg/L
Iron	E200.7	1	0.002	0.10	9.5	mg/L
Aluminum	E200.7	1	0.004	0.30	2.0	mg/L
Copper	E200.7	1	0.003	0.010	0.018	mg/L
Lead	E200.7	1	0.005	0.015	0.023	mg/L
Vanadium	E200.7	1	0.004	0.010	0.023	mg/L
Zinc	E200.7	1	0.002	0.010	0.25	mg/L
alpha-BHC	SW8081A	10	0.0335	0.200	0.040	ug/L
Aldrin	SW8081A	10	0.0272	0.200	0.033	ug/L
4,4'-DDE	SW8081A	10	0.0124	0.200	0.038	ug/L
Endrin	SW8081A	10	0.0111	0.200	0.028	ug/L



## Sample Result Summary

Report prepared for: Helen Mawhinney  
Environmental Technical Services

Date Received: 11/30/12

Date Reported: 12/17/12

1211237-003

SW-3

<u>Parameters:</u>	<u>Analysis Method</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Results</u>	<u>Unit</u>
Specific Conductance	E120.1	1	1	2.0	550	umhos/cm
Total Suspended Solids	E160.2	1	0.2	2	96	mg/L
pH	SM4500HB	1	0.10	2.00	7.65	S.U.
Total Organic Carbon	E415.1	1	0.30	0.50	0.65	mg/L
TPH as Motor Oil	SW8015B(M)	1	0.0900	0.40	1.1	mg/L
Iron	E200.7	1	0.002	0.10	2.7	mg/L
Aluminum	E200.7	1	0.004	0.30	0.33	mg/L
Vanadium	E200.7	1	0.004	0.010	0.014	mg/L
Zinc	E200.7	1	0.002	0.010	0.076	mg/L



## Sample Result Summary

Report prepared for: Helen Mawhinney  
Environmental Technical Services

Date Received: 11/30/12

Date Reported: 12/17/12

SW-4

1211237-004

<u>Parameters:</u>	<u>Analysis Method</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Results</u>	<u>Unit</u>
Specific Conductance	E120.1	1	1	2.0	200	umhos/cm
Total Suspended Solids	E160.2	1	0.5	5	360	mg/L
pH	SM4500HB	1	0.10	2.00	8.17	S.U.
Total Organic Carbon	E415.1	1	0.30	0.50	0.89	mg/L
TPH as Motor Oil	SW8015B(M)	1	0.0900	0.40	1.8	mg/L
Iron	E200.7	1	0.002	0.10	4.2	mg/L
Aluminum	E200.7	1	0.004	0.30	0.82	mg/L
Copper	E200.7	1	0.003	0.010	0.012	mg/L
Lead	E200.7	1	0.005	0.015	0.021	mg/L
Vanadium	E200.7	1	0.004	0.010	0.071	mg/L
Zinc	E200.7	1	0.002	0.010	0.15	mg/L



## Sample Result Summary

Report prepared for: Helen Mawhinney  
Environmental Technical Services

Date Received: 11/30/12

Date Reported: 12/17/12

### SW-5

1211237-005

<u>Parameters:</u>	<u>Analysis Method</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Results</u>	<u>Unit</u>
Specific Conductance	E120.1	1	1	2.0	72	umhos/cm
Total Suspended Solids	E160.2	1	0.1	1	20	mg/L
pH	SM4500HB	1	0.10	2.00	7.76	S.U.
Total Organic Carbon	E415.1	1	0.30	0.50	1.1	mg/L
TPH as Motor Oil	SW8015B(M)	1	0.0900	0.40	0.52	mg/L
Iron	E200.7	1	0.002	0.10	0.56	mg/L
Zinc	E200.7	1	0.002	0.010	0.046	mg/L

### SW-6

1211237-006

<u>Parameters:</u>	<u>Analysis Method</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Results</u>	<u>Unit</u>
Specific Conductance	E120.1	1	1	2.0	80	umhos/cm
Total Suspended Solids	E160.2	1	0.1	1	3.4	mg/L
pH	SM4500HB	1	0.10	2.00	7.58	S.U.
Total Organic Carbon	E415.1	1	0.30	0.50	1.1	mg/L
Iron	E200.7	1	0.002	0.10	0.29	mg/L
Zinc	E200.7	1	0.002	0.010	0.042	mg/L
4,4'-DDT	SW8081A	1	0.00287	0.0200	0.024	ug/L



## Sample Result Summary

Report prepared for: Helen Mawhinney  
Environmental Technical Services

Date Received: 11/30/12

Date Reported: 12/17/12

SW-7

1211237-007

<u>Parameters:</u>	<u>Analysis Method</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Results</u>	<u>Unit</u>
Specific Conductance	E120.1	1	1	2.0	130	umhos/cm
pH	SM4500HB	1	0.10	2.00	7.62	S.U.
Total Organic Carbon	E415.1	1	0.30	0.50	2.8	mg/L
Iron	E200.7	1	0.002	0.10	0.31	mg/L
Zinc	E200.7	1	0.002	0.010	0.030	mg/L

S PARR SW-11

1211237-008

<u>Parameters:</u>	<u>Analysis Method</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Results</u>	<u>Unit</u>
Specific Conductance	E120.1	1	1	2.0	170	umhos/cm
Total Suspended Solids	E160.2	1	0.2	2	15	mg/L
pH	SM4500HB	1	0.10	2.00	7.96	S.U.
Iron	E200.7	1	0.002	0.10	0.67	mg/L
Vanadium	E200.7	1	0.004	0.010	0.020	mg/L
Zinc	E200.7	1	0.002	0.010	0.021	mg/L



## Sample Result Summary

Report prepared for: Helen Mawhinney  
Environmental Technical Services

Date Received: 11/30/12

Date Reported: 12/17/12

S PARR SW-12

1211237-009

<u>Parameters:</u>	<u>Analysis Method</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Results</u>	<u>Unit</u>
Specific Conductance	E120.1	1	1	2.0	65	umhos/cm
Total Suspended Solids	E160.2	1	0.5	5	390	mg/L
pH	SM4500HB	1	0.10	2.00	9.17	S.U.
Total Organic Carbon	E415.1	1	0.30	0.50	0.63	mg/L
Iron	E200.7	1	0.002	0.10	23	mg/L
Aluminum	E200.7	1	0.004	0.30	15	mg/L
Copper	E200.7	1	0.003	0.010	0.039	mg/L
Lead	E200.7	1	0.005	0.015	0.044	mg/L
Vanadium	E200.7	1	0.004	0.010	0.046	mg/L
Zinc	E200.7	1	0.002	0.010	0.20	mg/L





## SAMPLE RESULTS

Report prepared for: Helen Mawhinney  
Environmental Technical Services

Date Received: 11/30/12  
Date Reported: 12/17/12

Client Sample ID:	SW-1	Lab Sample ID:	1211237-001A
Project Name/Location:	LRT SW Annual 11/30/12	Sample Matrix:	Storm Water
Project Number:			
Date/Time Sampled:	11/30/12 / 7:00		
Tag Number:	LRT SW Annual 11/30/12		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
Specific Conductance	E120.1	NA	11/30/12	1	1	2.0	48		umhos/cm	412926	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
pH	SM4500HB	NA	11/30/12	1	0.10	2.00	7.43		S.U.	412927	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
Total Suspended Solids	E160.2	NA	12/11/12	1	0.1	1	120		mg/L	413060	NA



## SAMPLE RESULTS

Report prepared for: Helen Mawhinney  
Environmental Technical Services

Date Received: 11/30/12  
Date Reported: 12/17/12

Client Sample ID:	SW-1	Lab Sample ID:	1211237-001B
Project Name/Location:	LRT SW Annual 11/30/12	Sample Matrix:	Storm Water
Project Number:			
Date/Time Sampled:	11/30/12 / 7:00		
Tag Number:	LRT SW Annual 11/30/12		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
Total Organic Carbon	E415.1	NA	12/10/12	1	0.30	0.50	1.1		mg/L	412983	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
MTBE	SW8260B	NA	12/12/12	1	0.17	0.50	ND		ug/L	413048	NA
Benzene	SW8260B	NA	12/12/12	1	0.087	0.50	ND		ug/L	413048	NA
Toluene	SW8260B	NA	12/12/12	1	0.059	0.50	ND		ug/L	413048	NA
Ethyl Benzene	SW8260B	NA	12/12/12	1	0.074	0.50	ND		ug/L	413048	NA
m,p-Xylene	SW8260B	NA	12/12/12	1	0.13	1.0	ND		ug/L	413048	NA
o-Xylene	SW8260B	NA	12/12/12	1	0.076	0.50	ND		ug/L	413048	NA
(S) Dibromofluoromethane	SW8260B	NA	12/12/12	1	61.2	131	82.5		%	413048	NA
(S) Toluene-d8	SW8260B	NA	12/12/12	1	75.1	127	85.3		%	413048	NA
(S) 4-Bromofluorobenzene	SW8260B	NA	12/12/12	1	64.1	120	98.8		%	413048	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH(Gasoline)	8260TPH	NA	12/12/12	1	31	50	ND		ug/L	413047	NA
(S) 4-Bromofluorobenzene	8260TPH	NA	12/12/12	1	41.5	125	75.0		%	413047	NA



## SAMPLE RESULTS

Report prepared for: Helen Mawhinney  
Environmental Technical Services

Date Received: 11/30/12  
Date Reported: 12/17/12

Client Sample ID:	SW-1	Lab Sample ID:	1211237-001C
Project Name/Location:	LRT SW Annual 11/30/12	Sample Matrix:	Storm Water
Project Number:			
Date/Time Sampled:	11/30/12 / 7:00		
Tag Number:	LRT SW Annual 11/30/12		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
Total Oil and Grease	E1664A	12/3/12	12/04/12	1	1.0	5.0	ND		mg/L	412881	7309

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH as Motor Oil	SW8015B(M)	12/3/12	12/04/12	1	0.0900	0.40	0.44		mg/L	412876	7296
Pentacosane (S)	SW8015B(M)	12/3/12	12/04/12	1	64.2	123	91.6		%	412876	7296



## SAMPLE RESULTS

Report prepared for: Helen Mawhinney  
Environmental Technical Services

Date Received: 11/30/12  
Date Reported: 12/17/12

Client Sample ID:	SW-1	Lab Sample ID:	1211237-001D
Project Name/Location:	LRT SW Annual 11/30/12	Sample Matrix:	Storm Water
Project Number:			
Date/Time Sampled:	11/30/12 / 7:00		
Tag Number:	LRT SW Annual 11/30/12		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
COD	H8000	12/5/12	12/05/12	1	8.0	20	ND		mg/L	412938	7356



## SAMPLE RESULTS

Report prepared for: Helen Mawhinney  
Environmental Technical Services

Date Received: 11/30/12  
Date Reported: 12/17/12

Client Sample ID:	SW-1	Lab Sample ID:	1211237-001E
Project Name/Location:	LRT SW Annual 11/30/12	Sample Matrix:	Storm Water
Project Number:			
Date/Time Sampled:	11/30/12 / 7:00		
Tag Number:	LRT SW Annual 11/30/12		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
Iron	E200.7	12/3/12	12/04/12	1	0.002	0.10	0.59		mg/L	412856	7300
Aluminum	E200.7	12/3/12	12/04/12	1	0.004	0.30	ND		mg/L	412856	7300
Copper	E200.7	12/3/12	12/04/12	1	0.003	0.010	ND		mg/L	412856	7300
Lead	E200.7	12/3/12	12/04/12	1	0.005	0.015	ND		mg/L	412856	7300
Vanadium	E200.7	12/3/12	12/04/12	1	0.004	0.010	ND		mg/L	412856	7300
Zinc	E200.7	12/3/12	12/04/12	1	0.002	0.010	0.12		mg/L	412856	7300



## SAMPLE RESULTS

**Report prepared for:** Helen Mawhinney  
Environmental Technical Services

**Date Received:** 11/30/12  
**Date Reported:** 12/17/12

<b>Client Sample ID:</b>	SW-1	<b>Lab Sample ID:</b>	1211237-001F
<b>Project Name/Location:</b>	LRT SW Annual 11/30/12	<b>Sample Matrix:</b>	Storm Water
<b>Project Number:</b>			
<b>Date/Time Sampled:</b>	11/30/12 / 7:00		
<b>Tag Number:</b>	LRT SW Annual 11/30/12		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
alpha-BHC	SW8081A	12/3/12	12/05/12	4	0.0134	0.0800	ND		ug/L	412908	7335
gamma-BHC	SW8081A	12/3/12	12/05/12	4	0.0107	0.0800	ND		ug/L	412908	7335
beta-BHC	SW8081A	12/3/12	12/05/12	4	0.0101	0.0800	ND		ug/L	412908	7335
delta-BHC	SW8081A	12/3/12	12/05/12	4	0.00878	0.0800	ND		ug/L	412908	7335
Heptachlor	SW8081A	12/3/12	12/05/12	4	0.00994	0.0800	ND		ug/L	412908	7335
Aldrin	SW8081A	12/3/12	12/05/12	4	0.0109	0.0800	ND		ug/L	412908	7335
Heptachlor epoxide	SW8081A	12/3/12	12/05/12	4	0.00600	0.0800	ND		ug/L	412908	7335
gamma-Chlordane	SW8081A	12/3/12	12/05/12	4	0.0129	0.0800	ND		ug/L	412908	7335
alpha-Chlordane	SW8081A	12/3/12	12/05/12	4	0.00494	0.0800	ND		ug/L	412908	7335
Endosulfan I	SW8081A	12/3/12	12/05/12	4	0.0194	0.0800	ND		ug/L	412908	7335
4,4'-DDE	SW8081A	12/3/12	12/05/12	4	0.00494	0.0800	ND		ug/L	412908	7335
Dieldrin	SW8081A	12/3/12	12/05/12	4	0.00726	0.0800	ND		ug/L	412908	7335
Endrin	SW8081A	12/3/12	12/05/12	4	0.00444	0.0800	ND		ug/L	412908	7335
4,4'-DDD	SW8081A	12/3/12	12/05/12	4	0.00436	0.0800	ND		ug/L	412908	7335
Endosulfan II	SW8081A	12/3/12	12/05/12	4	0.00608	0.0800	ND		ug/L	412908	7335
4,4'-DDT	SW8081A	12/3/12	12/05/12	4	0.0115	0.0800	ND		ug/L	412908	7335
Endrin aldehyde	SW8081A	12/3/12	12/05/12	4	0.0232	0.0800	ND		ug/L	412908	7335
Endosulfan sulfate	SW8081A	12/3/12	12/05/12	4	0.00648	0.0800	ND		ug/L	412908	7335
Methoxychlor	SW8081A	12/3/12	12/05/12	4	0.0263	0.200	ND		ug/L	412908	7335
Endrin Ketone	SW8081A	12/3/12	12/05/12	4	0.0134	0.0800	ND		ug/L	412908	7335
Chlordane	SW8081A	12/3/12	12/05/12	4	0.52	1.00	ND		ug/L	412908	7335
Toxaphene	SW8081A	12/3/12	12/05/12	4	1.2	4	ND		ug/L	412908	7335
TCMX (S)	SW8081A	12/3/12	12/05/12	4	40.3	118	67.1		%	412908	7335
DCBP (S)	SW8081A	12/3/12	12/05/12	4	52	116	109		%	412908	7335

**NOTE:** Reporting limits increased due to the nature of the sample matrix (dark color extract).



## SAMPLE RESULTS

Report prepared for: Helen Mawhinney  
Environmental Technical Services

Date Received: 11/30/12  
Date Reported: 12/17/12

Client Sample ID:	SW-2	Lab Sample ID:	1211237-002A
Project Name/Location:	LRT SW Annual 11/30/12	Sample Matrix:	Storm Water
Project Number:			
Date/Time Sampled:	11/30/12 / 7:30		
Tag Number:	LRT SW Annual 11/30/12		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
Specific Conductance	E120.1	NA	11/30/12	1	1	2.0	220		umhos/cm	412926	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
pH	SM4500HB	NA	11/30/12	1	0.10	2.00	8.08		S.U.	412927	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
Total Suspended Solids	E160.2	NA	12/11/12	1	0.5	5	180		mg/L	413060	NA





## SAMPLE RESULTS

Report prepared for: Helen Mawhinney  
Environmental Technical Services

Date Received: 11/30/12  
Date Reported: 12/17/12

Client Sample ID:	SW-2	Lab Sample ID:	1211237-002B
Project Name/Location:	LRT SW Annual 11/30/12	Sample Matrix:	Storm Water
Project Number:			
Date/Time Sampled:	11/30/12 / 7:30		
Tag Number:	LRT SW Annual 11/30/12		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
Total Organic Carbon	E415.1	NA	12/10/12	1	0.30	0.50	1.2		mg/L	412983	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
MTBE	SW8260B	NA	12/12/12	1	0.17	0.50	ND		ug/L	413048	NA
Benzene	SW8260B	NA	12/12/12	1	0.087	0.50	ND		ug/L	413048	NA
Toluene	SW8260B	NA	12/12/12	1	0.059	0.50	ND		ug/L	413048	NA
Ethyl Benzene	SW8260B	NA	12/12/12	1	0.074	0.50	ND		ug/L	413048	NA
m,p-Xylene	SW8260B	NA	12/12/12	1	0.13	1.0	ND		ug/L	413048	NA
o-Xylene	SW8260B	NA	12/12/12	1	0.076	0.50	ND		ug/L	413048	NA
(S) Dibromofluoromethane	SW8260B	NA	12/12/12	1	61.2	131	85.6		%	413048	NA
(S) Toluene-d8	SW8260B	NA	12/12/12	1	75.1	127	85.8		%	413048	NA
(S) 4-Bromofluorobenzene	SW8260B	NA	12/12/12	1	64.1	120	97.1		%	413048	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH(Gasoline)	8260TPH	NA	12/12/12	1	31	50	ND		ug/L	413047	NA
(S) 4-Bromofluorobenzene	8260TPH	NA	12/12/12	1	41.5	125	74.3		%	413047	NA



## SAMPLE RESULTS

Report prepared for: Helen Mawhinney  
Environmental Technical Services

Date Received: 11/30/12  
Date Reported: 12/17/12

Client Sample ID:	SW-2	Lab Sample ID:	1211237-002C
Project Name/Location:	LRT SW Annual 11/30/12	Sample Matrix:	Storm Water
Project Number:			
Date/Time Sampled:	11/30/12 / 7:30		
Tag Number:	LRT SW Annual 11/30/12		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
Total Oil and Grease	E1664A	12/3/12	12/04/12	1	1.0	5.0	ND		mg/L	412881	7309

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH as Motor Oil	SW8015B(M)	12/3/12	12/04/12	1	0.0900	0.40	1.6		mg/L	412876	7296
Pentacosane (S)	SW8015B(M)	12/3/12	12/04/12	1	64.2	123	96.5		%	412876	7296

**NOTE:** x-Not typical of TPH as Diesel Standard. Diesel result is due to carry over from TPH Motor Oil quantitation range into TPH as Diesel quantitation range.



## SAMPLE RESULTS

Report prepared for: Helen Mawhinney  
Environmental Technical Services

Date Received: 11/30/12  
Date Reported: 12/17/12

Client Sample ID:	SW-2	Lab Sample ID:	1211237-002D
Project Name/Location:	LRT SW Annual 11/30/12	Sample Matrix:	Storm Water
Project Number:			
Date/Time Sampled:	11/30/12 / 7:30		
Tag Number:	LRT SW Annual 11/30/12		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
COD	H8000	12/5/12	12/05/12	1	8.0	20	ND		mg/L	412938	7356



## SAMPLE RESULTS

Report prepared for: Helen Mawhinney  
Environmental Technical Services

Date Received: 11/30/12  
Date Reported: 12/17/12

Client Sample ID:	SW-2	Lab Sample ID:	1211237-002E
Project Name/Location:	LRT SW Annual 11/30/12	Sample Matrix:	Storm Water
Project Number:			
Date/Time Sampled:	11/30/12 / 7:30		
Tag Number:	LRT SW Annual 11/30/12		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
Iron	E200.7	12/3/12	12/04/12	1	0.002	0.10	9.5		mg/L	412856	7300
Aluminum	E200.7	12/3/12	12/04/12	1	0.004	0.30	2.0		mg/L	412856	7300
Copper	E200.7	12/3/12	12/04/12	1	0.003	0.010	0.018		mg/L	412856	7300
Lead	E200.7	12/3/12	12/04/12	1	0.005	0.015	0.023		mg/L	412856	7300
Vanadium	E200.7	12/3/12	12/04/12	1	0.004	0.010	0.023		mg/L	412856	7300
Zinc	E200.7	12/3/12	12/04/12	1	0.002	0.010	0.25		mg/L	412856	7300



## SAMPLE RESULTS

**Report prepared for:** Helen Mawhinney  
Environmental Technical Services

**Date Received:** 11/30/12  
**Date Reported:** 12/17/12

<b>Client Sample ID:</b>	SW-2	<b>Lab Sample ID:</b>	1211237-002F
<b>Project Name/Location:</b>	LRT SW Annual 11/30/12	<b>Sample Matrix:</b>	Storm Water
<b>Project Number:</b>			
<b>Date/Time Sampled:</b>	11/30/12 / 7:30		
<b>Tag Number:</b>	LRT SW Annual 11/30/12		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
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*The results shown below are reported using their MDL.*

alpha-BHC	SW8081A	12/3/12	12/05/12	10	0.0335	0.200	0.040	J	ug/L	412908	7335
gamma-BHC	SW8081A	12/3/12	12/05/12	10	0.0269	0.200	ND		ug/L	412908	7335
beta-BHC	SW8081A	12/3/12	12/05/12	10	0.0252	0.200	ND		ug/L	412908	7335
delta-BHC	SW8081A	12/3/12	12/05/12	10	0.0220	0.200	ND		ug/L	412908	7335
Heptachlor	SW8081A	12/3/12	12/05/12	10	0.0249	0.200	ND		ug/L	412908	7335
Aldrin	SW8081A	12/3/12	12/05/12	10	0.0272	0.200	0.033	J	ug/L	412908	7335
Heptachlor epoxide	SW8081A	12/3/12	12/05/12	10	0.0150	0.200	ND		ug/L	412908	7335
gamma-Chlordane	SW8081A	12/3/12	12/05/12	10	0.0322	0.200	ND		ug/L	412908	7335
alpha-Chlordane	SW8081A	12/3/12	12/05/12	10	0.0124	0.200	ND		ug/L	412908	7335
Endosulfan I	SW8081A	12/3/12	12/05/12	10	0.0486	0.200	ND		ug/L	412908	7335
4,4'-DDE	SW8081A	12/3/12	12/05/12	10	0.0124	0.200	0.038	J	ug/L	412908	7335
Dieldrin	SW8081A	12/3/12	12/05/12	10	0.0182	0.200	ND		ug/L	412908	7335
Endrin	SW8081A	12/3/12	12/05/12	10	0.0111	0.200	0.028	J	ug/L	412908	7335
4,4'-DDD	SW8081A	12/3/12	12/05/12	10	0.0109	0.200	ND		ug/L	412908	7335
Endosulfan II	SW8081A	12/3/12	12/05/12	10	0.0152	0.200	ND		ug/L	412908	7335
4,4'-DDT	SW8081A	12/3/12	12/05/12	10	0.0287	0.200	ND		ug/L	412908	7335
Endrin aldehyde	SW8081A	12/3/12	12/05/12	10	0.0580	0.200	ND		ug/L	412908	7335
Endosulfan sulfate	SW8081A	12/3/12	12/05/12	10	0.0162	0.200	ND		ug/L	412908	7335
Methoxychlor	SW8081A	12/3/12	12/05/12	10	0.0658	0.500	ND		ug/L	412908	7335
Endrin Ketone	SW8081A	12/3/12	12/05/12	10	0.0336	0.200	ND		ug/L	412908	7335
Chlordane	SW8081A	12/3/12	12/05/12	10	1.3	2.50	ND		ug/L	412908	7335
Toxaphene	SW8081A	12/3/12	12/05/12	10	3.1	10	ND		ug/L	412908	7335
TCMX (S)	SW8081A	12/3/12	12/05/12	10	40.3	118	77.3		%	412908	7335
DCBP (S)	SW8081A	12/3/12	12/05/12	10	52	116	102		%	412908	7335

**NOTE:** Reporting limits increased due to the nature of the sample matrix (dark color extract).



## SAMPLE RESULTS

Report prepared for: Helen Mawhinney  
Environmental Technical Services

Date Received: 11/30/12

Date Reported: 12/17/12

Client Sample ID:	SW-3	Lab Sample ID:	1211237-003A
Project Name/Location:	LRT SW Annual 11/30/12	Sample Matrix:	Storm Water
Project Number:			
Date/Time Sampled:	11/30/12 / 8:30		
Tag Number:	LRT SW Annual 11/30/12		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
Specific Conductance	E120.1	NA	11/30/12	1	1	2.0	550		umhos/cm	412926	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
pH	SM4500HB	NA	11/30/12	1	0.10	2.00	7.65		S.U.	412927	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
Total Suspended Solids	E160.2	NA	12/11/12	1	0.2	2	96		mg/L	413060	NA



## SAMPLE RESULTS

Report prepared for: Helen Mawhinney  
Environmental Technical Services

Date Received: 11/30/12  
Date Reported: 12/17/12

Client Sample ID:	SW-3	Lab Sample ID:	1211237-003B
Project Name/Location:	LRT SW Annual 11/30/12	Sample Matrix:	Storm Water
Project Number:			
Date/Time Sampled:	11/30/12 / 8:30		
Tag Number:	LRT SW Annual 11/30/12		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
Total Organic Carbon	E415.1	NA	12/10/12	1	0.30	0.50	0.65		mg/L	412983	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
MTBE	SW8260B	NA	12/12/12	1	0.17	0.50	ND		ug/L	413048	NA
Benzene	SW8260B	NA	12/12/12	1	0.087	0.50	ND		ug/L	413048	NA
Toluene	SW8260B	NA	12/12/12	1	0.059	0.50	ND		ug/L	413048	NA
Ethyl Benzene	SW8260B	NA	12/12/12	1	0.074	0.50	ND		ug/L	413048	NA
m,p-Xylene	SW8260B	NA	12/12/12	1	0.13	1.0	ND		ug/L	413048	NA
o-Xylene	SW8260B	NA	12/12/12	1	0.076	0.50	ND		ug/L	413048	NA
(S) Dibromofluoromethane	SW8260B	NA	12/12/12	1	61.2	131	83.4		%	413048	NA
(S) Toluene-d8	SW8260B	NA	12/12/12	1	75.1	127	86.1		%	413048	NA
(S) 4-Bromofluorobenzene	SW8260B	NA	12/12/12	1	64.1	120	99.6		%	413048	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH(Gasoline)	8260TPH	NA	12/12/12	1	31	50	ND		ug/L	413047	NA
(S) 4-Bromofluorobenzene	8260TPH	NA	12/12/12	1	41.5	125	66.8		%	413047	NA





## SAMPLE RESULTS

Report prepared for: Helen Mawhinney  
Environmental Technical Services

Date Received: 11/30/12  
Date Reported: 12/17/12

Client Sample ID:	SW-3	Lab Sample ID:	1211237-003C
Project Name/Location:	LRT SW Annual 11/30/12	Sample Matrix:	Storm Water
Project Number:			
Date/Time Sampled:	11/30/12 / 8:30		
Tag Number:	LRT SW Annual 11/30/12		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
Total Oil and Grease	E1664A	12/3/12	12/04/12	1	1.0	5.0	ND		mg/L	412881	7309

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH as Motor Oil	SW8015B(M)	12/3/12	12/04/12	1	0.0900	0.40	1.1		mg/L	412876	7296
Pentacosane (S)	SW8015B(M)	12/3/12	12/04/12	1	64.2	123	85.7		%	412876	7296



## SAMPLE RESULTS

Report prepared for: Helen Mawhinney  
Environmental Technical Services

Date Received: 11/30/12  
Date Reported: 12/17/12

Client Sample ID:	SW-3	Lab Sample ID:	1211237-003D
Project Name/Location:	LRT SW Annual 11/30/12	Sample Matrix:	Storm Water
Project Number:			
Date/Time Sampled:	11/30/12 / 8:30		
Tag Number:	LRT SW Annual 11/30/12		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
COD	H8000	12/5/12	12/05/12	1	8.0	20	ND		mg/L	412938	7356



## SAMPLE RESULTS

Report prepared for: Helen Mawhinney  
Environmental Technical Services

Date Received: 11/30/12  
Date Reported: 12/17/12

Client Sample ID:	SW-3	Lab Sample ID:	1211237-003E
Project Name/Location:	LRT SW Annual 11/30/12	Sample Matrix:	Storm Water
Project Number:			
Date/Time Sampled:	11/30/12 / 8:30		
Tag Number:	LRT SW Annual 11/30/12		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
Iron	E200.7	12/3/12	12/04/12	1	0.002	0.10	2.7		mg/L	412856	7300
Aluminum	E200.7	12/3/12	12/04/12	1	0.004	0.30	0.33		mg/L	412856	7300
Copper	E200.7	12/3/12	12/04/12	1	0.003	0.010	ND		mg/L	412856	7300
Lead	E200.7	12/3/12	12/04/12	1	0.005	0.015	ND		mg/L	412856	7300
Vanadium	E200.7	12/3/12	12/04/12	1	0.004	0.010	0.014		mg/L	412856	7300
Zinc	E200.7	12/3/12	12/04/12	1	0.002	0.010	0.076		mg/L	412856	7300



## SAMPLE RESULTS

Report prepared for: Helen Mawhinney  
Environmental Technical Services

Date Received: 11/30/12  
Date Reported: 12/17/12

Client Sample ID:	SW-3	Lab Sample ID:	1211237-003F
Project Name/Location:	LRT SW Annual 11/30/12	Sample Matrix:	Storm Water
Project Number:			
Date/Time Sampled:	11/30/12 / 8:30		
Tag Number:	LRT SW Annual 11/30/12		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
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The results shown below are reported using their MDL.

alpha-BHC	SW8081A	12/3/12	12/05/12	10	0.0335	0.200	ND		ug/L	412908	7335
gamma-BHC	SW8081A	12/3/12	12/05/12	10	0.0269	0.200	ND		ug/L	412908	7335
beta-BHC	SW8081A	12/3/12	12/05/12	10	0.0252	0.200	ND		ug/L	412908	7335
delta-BHC	SW8081A	12/3/12	12/05/12	10	0.0220	0.200	ND		ug/L	412908	7335
Heptachlor	SW8081A	12/3/12	12/05/12	10	0.0249	0.200	ND		ug/L	412908	7335
Aldrin	SW8081A	12/3/12	12/05/12	10	0.0272	0.200	ND		ug/L	412908	7335
Heptachlor epoxide	SW8081A	12/3/12	12/05/12	10	0.0150	0.200	ND		ug/L	412908	7335
gamma-Chlordane	SW8081A	12/3/12	12/05/12	10	0.0322	0.200	ND		ug/L	412908	7335
alpha-Chlordane	SW8081A	12/3/12	12/05/12	10	0.0124	0.200	ND		ug/L	412908	7335
Endosulfan I	SW8081A	12/3/12	12/05/12	10	0.0486	0.200	ND		ug/L	412908	7335
4,4'-DDE	SW8081A	12/3/12	12/05/12	10	0.0124	0.200	ND		ug/L	412908	7335
Dieldrin	SW8081A	12/3/12	12/05/12	10	0.0182	0.200	ND		ug/L	412908	7335
Endrin	SW8081A	12/3/12	12/05/12	10	0.0111	0.200	ND		ug/L	412908	7335
4,4'-DDD	SW8081A	12/3/12	12/05/12	10	0.0109	0.200	ND		ug/L	412908	7335
Endosulfan II	SW8081A	12/3/12	12/05/12	10	0.0152	0.200	ND		ug/L	412908	7335
4,4'-DDT	SW8081A	12/3/12	12/05/12	10	0.0287	0.200	ND		ug/L	412908	7335
Endrin aldehyde	SW8081A	12/3/12	12/05/12	10	0.0580	0.200	ND		ug/L	412908	7335
Endosulfan sulfate	SW8081A	12/3/12	12/05/12	10	0.0162	0.200	ND		ug/L	412908	7335
Methoxychlor	SW8081A	12/3/12	12/05/12	10	0.0658	0.500	ND		ug/L	412908	7335
Endrin Ketone	SW8081A	12/3/12	12/05/12	10	0.0336	0.200	ND		ug/L	412908	7335
Chlordane	SW8081A	12/3/12	12/05/12	10	1.3	2.50	ND		ug/L	412908	7335
Toxaphene	SW8081A	12/3/12	12/05/12	10	3.1	10	ND		ug/L	412908	7335
TCMX (S)	SW8081A	12/3/12	12/05/12	10	40.3	118	65.4		%	412908	7335
DCBP (S)	SW8081A	12/3/12	12/05/12	10	52	116	102		%	412908	7335

NOTE: Reporting limits increased due to the nature of the sample matrix (dark color extract).



## SAMPLE RESULTS

Report prepared for: Helen Mawhinney  
Environmental Technical Services

Date Received: 11/30/12  
Date Reported: 12/17/12

Client Sample ID:	SW-4	Lab Sample ID:	1211237-004A
Project Name/Location:	LRT SW Annual 11/30/12	Sample Matrix:	Storm Water
Project Number:			
Date/Time Sampled:	11/30/12 / 8:00		
Tag Number:	LRT SW Annual 11/30/12		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
Specific Conductance	E120.1	NA	11/30/12	1	1	2.0	200		umhos/cm	412926	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
pH	SM4500HB	NA	11/30/12	1	0.10	2.00	8.17		S.U.	412927	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
Total Suspended Solids	E160.2	NA	12/11/12	1	0.5	5	360		mg/L	413060	NA



## SAMPLE RESULTS

**Report prepared for:** Helen Mawhinney  
Environmental Technical Services

**Date Received:** 11/30/12  
**Date Reported:** 12/17/12

<b>Client Sample ID:</b>	SW-4	<b>Lab Sample ID:</b>	1211237-004B
<b>Project Name/Location:</b>	LRT SW Annual 11/30/12	<b>Sample Matrix:</b>	Storm Water
<b>Project Number:</b>			
<b>Date/Time Sampled:</b>	11/30/12 / 8:00		
<b>Tag Number:</b>	LRT SW Annual 11/30/12		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
Total Organic Carbon	E415.1	NA	12/10/12	1	0.30	0.50	0.89		mg/L	412983	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
MTBE	SW8260B	NA	12/12/12	1	0.17	0.50	ND		ug/L	413048	NA
Benzene	SW8260B	NA	12/12/12	1	0.087	0.50	ND		ug/L	413048	NA
Toluene	SW8260B	NA	12/12/12	1	0.059	0.50	ND		ug/L	413048	NA
Ethyl Benzene	SW8260B	NA	12/12/12	1	0.074	0.50	ND		ug/L	413048	NA
m,p-Xylene	SW8260B	NA	12/12/12	1	0.13	1.0	ND		ug/L	413048	NA
o-Xylene	SW8260B	NA	12/12/12	1	0.076	0.50	ND		ug/L	413048	NA
(S) Dibromofluoromethane	SW8260B	NA	12/12/12	1	61.2	131	82.9		%	413048	NA
(S) Toluene-d8	SW8260B	NA	12/12/12	1	75.1	127	90.5		%	413048	NA
(S) 4-Bromofluorobenzene	SW8260B	NA	12/12/12	1	64.1	120	103		%	413048	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH(Gasoline)	8260TPH	NA	12/12/12	1	31	50	ND		ug/L	413047	NA
(S) 4-Bromofluorobenzene	8260TPH	NA	12/12/12	1	41.5	125	62.8		%	413047	NA



## SAMPLE RESULTS

Report prepared for: Helen Mawhinney  
Environmental Technical Services

Date Received: 11/30/12  
Date Reported: 12/17/12

Client Sample ID:	SW-4	Lab Sample ID:	1211237-004C
Project Name/Location:	LRT SW Annual 11/30/12	Sample Matrix:	Storm Water
Project Number:			
Date/Time Sampled:	11/30/12 / 8:00		
Tag Number:	LRT SW Annual 11/30/12		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
Total Oil and Grease	E1664A	12/3/12	12/04/12	1	1.0	5.0	ND		mg/L	412881	7309

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH as Motor Oil	SW8015B(M)	12/3/12	12/04/12	1	0.0900	0.40	1.8		mg/L	412876	7296
Pentacosane (S)	SW8015B(M)	12/3/12	12/04/12	1	64.2	123	79.4		%	412876	7296





## SAMPLE RESULTS

Report prepared for: Helen Mawhinney  
Environmental Technical Services

Date Received: 11/30/12  
Date Reported: 12/17/12

Client Sample ID:	SW-4	Lab Sample ID:	1211237-004D
Project Name/Location:	LRT SW Annual 11/30/12	Sample Matrix:	Storm Water
Project Number:			
Date/Time Sampled:	11/30/12 / 8:00		
Tag Number:	LRT SW Annual 11/30/12		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
COD	H8000	12/5/12	12/05/12	1	8.0	20	ND		mg/L	412938	7356



## SAMPLE RESULTS

Report prepared for: Helen Mawhinney  
Environmental Technical Services

Date Received: 11/30/12  
Date Reported: 12/17/12

Client Sample ID:	SW-4	Lab Sample ID:	1211237-004E
Project Name/Location:	LRT SW Annual 11/30/12	Sample Matrix:	Storm Water
Project Number:			
Date/Time Sampled:	11/30/12 / 8:00		
Tag Number:	LRT SW Annual 11/30/12		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
Iron	E200.7	12/3/12	12/04/12	1	0.002	0.10	4.2		mg/L	412856	7300
Aluminum	E200.7	12/3/12	12/04/12	1	0.004	0.30	0.82		mg/L	412856	7300
Copper	E200.7	12/3/12	12/04/12	1	0.003	0.010	0.012		mg/L	412856	7300
Lead	E200.7	12/3/12	12/04/12	1	0.005	0.015	0.021		mg/L	412856	7300
Vanadium	E200.7	12/3/12	12/04/12	1	0.004	0.010	0.071		mg/L	412856	7300
Zinc	E200.7	12/3/12	12/04/12	1	0.002	0.010	0.15		mg/L	412856	7300



## SAMPLE RESULTS

**Report prepared for:** Helen Mawhinney  
Environmental Technical Services

**Date Received:** 11/30/12  
**Date Reported:** 12/17/12

<b>Client Sample ID:</b>	SW-4	<b>Lab Sample ID:</b>	1211237-004F
<b>Project Name/Location:</b>	LRT SW Annual 11/30/12	<b>Sample Matrix:</b>	Storm Water
<b>Project Number:</b>			
<b>Date/Time Sampled:</b>	11/30/12 / 8:00		
<b>Tag Number:</b>	LRT SW Annual 11/30/12		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
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*The results shown below are reported using their MDL.*

alpha-BHC	SW8081A	12/3/12	12/05/12	20	0.0670	0.400	ND		ug/L	412908	7335
gamma-BHC	SW8081A	12/3/12	12/05/12	20	0.0537	0.400	ND		ug/L	412908	7335
beta-BHC	SW8081A	12/3/12	12/05/12	20	0.0503	0.400	ND		ug/L	412908	7335
delta-BHC	SW8081A	12/3/12	12/05/12	20	0.0439	0.400	ND		ug/L	412908	7335
Heptachlor	SW8081A	12/3/12	12/05/12	20	0.0497	0.400	ND		ug/L	412908	7335
Aldrin	SW8081A	12/3/12	12/05/12	20	0.0544	0.400	ND		ug/L	412908	7335
Heptachlor epoxide	SW8081A	12/3/12	12/05/12	20	0.0300	0.400	ND		ug/L	412908	7335
gamma-Chlordane	SW8081A	12/3/12	12/05/12	20	0.0643	0.400	ND		ug/L	412908	7335
alpha-Chlordane	SW8081A	12/3/12	12/05/12	20	0.0247	0.400	ND		ug/L	412908	7335
Endosulfan I	SW8081A	12/3/12	12/05/12	20	0.0972	0.400	ND		ug/L	412908	7335
4,4'-DDE	SW8081A	12/3/12	12/05/12	20	0.0247	0.400	ND		ug/L	412908	7335
Dieldrin	SW8081A	12/3/12	12/05/12	20	0.0363	0.400	ND		ug/L	412908	7335
Endrin	SW8081A	12/3/12	12/05/12	20	0.0222	0.400	ND		ug/L	412908	7335
4,4'-DDD	SW8081A	12/3/12	12/05/12	20	0.0218	0.400	ND		ug/L	412908	7335
Endosulfan II	SW8081A	12/3/12	12/05/12	20	0.0304	0.400	ND		ug/L	412908	7335
4,4'-DDT	SW8081A	12/3/12	12/05/12	20	0.0573	0.400	ND		ug/L	412908	7335
Endrin aldehyde	SW8081A	12/3/12	12/05/12	20	0.116	0.400	ND		ug/L	412908	7335
Endosulfan sulfate	SW8081A	12/3/12	12/05/12	20	0.0324	0.400	ND		ug/L	412908	7335
Methoxychlor	SW8081A	12/3/12	12/05/12	20	0.132	1.00	ND		ug/L	412908	7335
Endrin Ketone	SW8081A	12/3/12	12/05/12	20	0.0671	0.400	ND		ug/L	412908	7335
Chlordane	SW8081A	12/3/12	12/05/12	20	2.6	5.00	ND		ug/L	412908	7335
Toxaphene	SW8081A	12/3/12	12/05/12	20	6.2	20	ND		ug/L	412908	7335
TCMX (S)	SW8081A	12/3/12	12/05/12	20	40.3	118	0.000	D	%	412908	7335
DCBP (S)	SW8081A	12/3/12	12/05/12	20	52	116	0.000	D	%	412908	7335

**NOTE:** Surrogates diluted out. Reporting limits increased due to the nature of the sample matrix (dark color extract).



## SAMPLE RESULTS

Report prepared for: Helen Mawhinney  
Environmental Technical Services

Date Received: 11/30/12  
Date Reported: 12/17/12

Client Sample ID:	SW-5	Lab Sample ID:	1211237-005A
Project Name/Location:	LRT SW Annual 11/30/12	Sample Matrix:	Storm Water
Project Number:			
Date/Time Sampled:	11/30/12 / 8:30		
Tag Number:	LRT SW Annual 11/30/12		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
Specific Conductance	E120.1	NA	11/30/12	1	1	2.0	72		umhos/cm	412926	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
pH	SM4500HB	NA	11/30/12	1	0.10	2.00	7.76		S.U.	412927	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
Total Suspended Solids	E160.2	NA	12/11/12	1	0.1	1	20		mg/L	413060	NA



## SAMPLE RESULTS

**Report prepared for:** Helen Mawhinney  
Environmental Technical Services

**Date Received:** 11/30/12  
**Date Reported:** 12/17/12

<b>Client Sample ID:</b>	SW-5	<b>Lab Sample ID:</b>	1211237-005B
<b>Project Name/Location:</b>	LRT SW Annual 11/30/12	<b>Sample Matrix:</b>	Storm Water
<b>Project Number:</b>			
<b>Date/Time Sampled:</b>	11/30/12 / 8:30		
<b>Tag Number:</b>	LRT SW Annual 11/30/12		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
Total Organic Carbon	E415.1	NA	12/10/12	1	0.30	0.50	1.1		mg/L	412983	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
MTBE	SW8260B	NA	12/12/12	1	0.17	0.50	ND		ug/L	413048	NA
Benzene	SW8260B	NA	12/12/12	1	0.087	0.50	ND		ug/L	413048	NA
Toluene	SW8260B	NA	12/12/12	1	0.059	0.50	ND		ug/L	413048	NA
Ethyl Benzene	SW8260B	NA	12/12/12	1	0.074	0.50	ND		ug/L	413048	NA
m,p-Xylene	SW8260B	NA	12/12/12	1	0.13	1.0	ND		ug/L	413048	NA
o-Xylene	SW8260B	NA	12/12/12	1	0.076	0.50	ND		ug/L	413048	NA
(S) Dibromofluoromethane	SW8260B	NA	12/12/12	1	61.2	131	85.5		%	413048	NA
(S) Toluene-d8	SW8260B	NA	12/12/12	1	75.1	127	87.4		%	413048	NA
(S) 4-Bromofluorobenzene	SW8260B	NA	12/12/12	1	64.1	120	100		%	413048	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH(Gasoline)	8260TPH	NA	12/12/12	1	31	50	ND		ug/L	413047	NA
(S) 4-Bromofluorobenzene	8260TPH	NA	12/12/12	1	41.5	125	52.6		%	413047	NA



## SAMPLE RESULTS

Report prepared for: Helen Mawhinney  
Environmental Technical Services

Date Received: 11/30/12  
Date Reported: 12/17/12

Client Sample ID:	SW-5	Lab Sample ID:	1211237-005C
Project Name/Location:	LRT SW Annual 11/30/12	Sample Matrix:	Storm Water
Project Number:			
Date/Time Sampled:	11/30/12 / 8:30		
Tag Number:	LRT SW Annual 11/30/12		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
Total Oil and Grease	E1664A	12/3/12	12/04/12	1	1.0	5.0	ND		mg/L	412881	7309

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH as Motor Oil	SW8015B(M)	12/3/12	12/04/12	1	0.0900	0.40	0.52	x	mg/L	412876	7296
Pentacosane (S)	SW8015B(M)	12/3/12	12/04/12	1	64.2	123	85.0		%	412876	7296

NOTE: x-Not typical of TPH as Motor Oil Standard pattern (possibly waste oil).



## SAMPLE RESULTS

Report prepared for: Helen Mawhinney  
Environmental Technical Services

Date Received: 11/30/12  
Date Reported: 12/17/12

Client Sample ID:	SW-5	Lab Sample ID:	1211237-005D
Project Name/Location:	LRT SW Annual 11/30/12	Sample Matrix:	Storm Water
Project Number:			
Date/Time Sampled:	11/30/12 / 8:30		
Tag Number:	LRT SW Annual 11/30/12		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
COD	H8000	12/5/12	12/05/12	1	8.0	20	ND		mg/L	412938	7356





## SAMPLE RESULTS

Report prepared for: Helen Mawhinney  
Environmental Technical Services

Date Received: 11/30/12  
Date Reported: 12/17/12

Client Sample ID:	SW-5	Lab Sample ID:	1211237-005E
Project Name/Location:	LRT SW Annual 11/30/12	Sample Matrix:	Storm Water
Project Number:			
Date/Time Sampled:	11/30/12 / 8:30		
Tag Number:	LRT SW Annual 11/30/12		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
Iron	E200.7	12/3/12	12/04/12	1	0.002	0.10	0.56		mg/L	412856	7300
Aluminum	E200.7	12/3/12	12/04/12	1	0.004	0.30	ND		mg/L	412856	7300
Copper	E200.7	12/3/12	12/04/12	1	0.003	0.010	ND		mg/L	412856	7300
Lead	E200.7	12/3/12	12/04/12	1	0.005	0.015	ND		mg/L	412856	7300
Vanadium	E200.7	12/3/12	12/04/12	1	0.004	0.010	ND		mg/L	412856	7300
Zinc	E200.7	12/3/12	12/04/12	1	0.002	0.010	0.046		mg/L	412856	7300



## SAMPLE RESULTS

Report prepared for: Helen Mawhinney  
Environmental Technical Services

Date Received: 11/30/12  
Date Reported: 12/17/12

Client Sample ID:	SW-5	Lab Sample ID:	1211237-005F
Project Name/Location:	LRT SW Annual 11/30/12	Sample Matrix:	Storm Water
Project Number:			
Date/Time Sampled:	11/30/12 / 8:30		
Tag Number:	LRT SW Annual 11/30/12		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
alpha-BHC	SW8081A	12/3/12	12/05/12	4	0.0134	0.0800	ND		ug/L	412908	7335
gamma-BHC	SW8081A	12/3/12	12/05/12	4	0.0107	0.0800	ND		ug/L	412908	7335
beta-BHC	SW8081A	12/3/12	12/05/12	4	0.0101	0.0800	ND		ug/L	412908	7335
delta-BHC	SW8081A	12/3/12	12/05/12	4	0.00878	0.0800	ND		ug/L	412908	7335
Heptachlor	SW8081A	12/3/12	12/05/12	4	0.00994	0.0800	ND		ug/L	412908	7335
Aldrin	SW8081A	12/3/12	12/05/12	4	0.0109	0.0800	ND		ug/L	412908	7335
Heptachlor epoxide	SW8081A	12/3/12	12/05/12	4	0.00600	0.0800	ND		ug/L	412908	7335
gamma-Chlordane	SW8081A	12/3/12	12/05/12	4	0.0129	0.0800	ND		ug/L	412908	7335
alpha-Chlordane	SW8081A	12/3/12	12/05/12	4	0.00494	0.0800	ND		ug/L	412908	7335
Endosulfan I	SW8081A	12/3/12	12/05/12	4	0.0194	0.0800	ND		ug/L	412908	7335
4,4'-DDE	SW8081A	12/3/12	12/05/12	4	0.00494	0.0800	ND		ug/L	412908	7335
Dieldrin	SW8081A	12/3/12	12/05/12	4	0.00726	0.0800	ND		ug/L	412908	7335
Endrin	SW8081A	12/3/12	12/05/12	4	0.00444	0.0800	ND		ug/L	412908	7335
4,4'-DDD	SW8081A	12/3/12	12/05/12	4	0.00436	0.0800	ND		ug/L	412908	7335
Endosulfan II	SW8081A	12/3/12	12/05/12	4	0.00608	0.0800	ND		ug/L	412908	7335
4,4'-DDT	SW8081A	12/3/12	12/05/12	4	0.0115	0.0800	ND		ug/L	412908	7335
Endrin aldehyde	SW8081A	12/3/12	12/05/12	4	0.0232	0.0800	ND		ug/L	412908	7335
Endosulfan sulfate	SW8081A	12/3/12	12/05/12	4	0.00648	0.0800	ND		ug/L	412908	7335
Methoxychlor	SW8081A	12/3/12	12/05/12	4	0.0263	0.200	ND		ug/L	412908	7335
Endrin Ketone	SW8081A	12/3/12	12/05/12	4	0.0134	0.0800	ND		ug/L	412908	7335
Chlordane	SW8081A	12/3/12	12/05/12	4	0.52	1.00	ND		ug/L	412908	7335
Toxaphene	SW8081A	12/3/12	12/05/12	4	1.2	4	ND		ug/L	412908	7335
TCMX (S)	SW8081A	12/3/12	12/05/12	4	40.3	118	68.2		%	412908	7335
DCBP (S)	SW8081A	12/3/12	12/05/12	4	52	116	95.2		%	412908	7335

**NOTE:** Reporting limits increased due to the nature of the sample matrix (dark color extract).



## SAMPLE RESULTS

Report prepared for: Helen Mawhinney  
Environmental Technical Services

Date Received: 11/30/12  
Date Reported: 12/17/12

Client Sample ID:	SW-6	Lab Sample ID:	1211237-006A
Project Name/Location:	LRT SW Annual 11/30/12	Sample Matrix:	Storm Water
Project Number:			
Date/Time Sampled:	11/30/12 / 9:00		
Tag Number:	LRT SW Annual 11/30/12		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
Specific Conductance	E120.1	NA	11/30/12	1	1	2.0	80		umhos/cm	412926	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
pH	SM4500HB	NA	11/30/12	1	0.10	2.00	7.58		S.U.	412927	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
Total Suspended Solids	E160.2	NA	12/11/12	1	0.1	1	3.4		mg/L	413060	NA



## SAMPLE RESULTS

Report prepared for: Helen Mawhinney  
Environmental Technical Services

Date Received: 11/30/12  
Date Reported: 12/17/12

Client Sample ID:	SW-6	Lab Sample ID:	1211237-006B
Project Name/Location:	LRT SW Annual 11/30/12	Sample Matrix:	Storm Water
Project Number:			
Date/Time Sampled:	11/30/12 / 9:00		
Tag Number:	LRT SW Annual 11/30/12		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
Total Organic Carbon	E415.1	NA	12/10/12	1	0.30	0.50	1.1		mg/L	412983	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
MTBE	SW8260B	NA	12/12/12	1	0.17	0.50	ND		ug/L	413048	NA
Benzene	SW8260B	NA	12/12/12	1	0.087	0.50	ND		ug/L	413048	NA
Toluene	SW8260B	NA	12/12/12	1	0.059	0.50	ND		ug/L	413048	NA
Ethyl Benzene	SW8260B	NA	12/12/12	1	0.074	0.50	ND		ug/L	413048	NA
m,p-Xylene	SW8260B	NA	12/12/12	1	0.13	1.0	ND		ug/L	413048	NA
o-Xylene	SW8260B	NA	12/12/12	1	0.076	0.50	ND		ug/L	413048	NA
(S) Dibromofluoromethane	SW8260B	NA	12/12/12	1	61.2	131	83.0		%	413048	NA
(S) Toluene-d8	SW8260B	NA	12/12/12	1	75.1	127	88.4		%	413048	NA
(S) 4-Bromofluorobenzene	SW8260B	NA	12/12/12	1	64.1	120	98.5		%	413048	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH(Gasoline)	8260TPH	NA	12/12/12	1	31	50	ND		ug/L	413047	NA
(S) 4-Bromofluorobenzene	8260TPH	NA	12/12/12	1	41.5	125	65.6		%	413047	NA



## SAMPLE RESULTS

Report prepared for: Helen Mawhinney  
Environmental Technical Services

Date Received: 11/30/12  
Date Reported: 12/17/12

Client Sample ID:	SW-6	Lab Sample ID:	1211237-006C
Project Name/Location:	LRT SW Annual 11/30/12	Sample Matrix:	Storm Water
Project Number:			
Date/Time Sampled:	11/30/12 / 9:00		
Tag Number:	LRT SW Annual 11/30/12		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
Total Oil and Grease	E1664A	12/3/12	12/04/12	1	1.0	5.0	ND		mg/L	412881	7309

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH as Motor Oil	SW8015B(M)	12/3/12	12/04/12	1	0.0900	0.40	ND		mg/L	412876	7296
Pentacosane (S)	SW8015B(M)	12/3/12	12/04/12	1	64.2	123	89.1		%	412876	7296



## SAMPLE RESULTS

Report prepared for: Helen Mawhinney  
Environmental Technical Services

Date Received: 11/30/12  
Date Reported: 12/17/12

Client Sample ID:	SW-6	Lab Sample ID:	1211237-006D
Project Name/Location:	LRT SW Annual 11/30/12	Sample Matrix:	Storm Water
Project Number:			
Date/Time Sampled:	11/30/12 / 9:00		
Tag Number:	LRT SW Annual 11/30/12		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
COD	H8000	12/5/12	12/05/12	1	8.0	20	ND		mg/L	412938	7356



## SAMPLE RESULTS

Report prepared for: Helen Mawhinney  
Environmental Technical Services

Date Received: 11/30/12  
Date Reported: 12/17/12

Client Sample ID:	SW-6	Lab Sample ID:	1211237-006E
Project Name/Location:	LRT SW Annual 11/30/12	Sample Matrix:	Storm Water
Project Number:			
Date/Time Sampled:	11/30/12 / 9:00		
Tag Number:	LRT SW Annual 11/30/12		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
Iron	E200.7	12/3/12	12/04/12	1	0.002	0.10	0.29		mg/L	412856	7300
Aluminum	E200.7	12/3/12	12/04/12	1	0.004	0.30	ND		mg/L	412856	7300
Copper	E200.7	12/3/12	12/04/12	1	0.003	0.010	ND		mg/L	412856	7300
Lead	E200.7	12/3/12	12/04/12	1	0.005	0.015	ND		mg/L	412856	7300
Vanadium	E200.7	12/3/12	12/04/12	1	0.004	0.010	ND		mg/L	412856	7300
Zinc	E200.7	12/3/12	12/04/12	1	0.002	0.010	0.042		mg/L	412856	7300





## SAMPLE RESULTS

**Report prepared for:** Helen Mawhinney  
Environmental Technical Services

**Date Received:** 11/30/12  
**Date Reported:** 12/17/12

<b>Client Sample ID:</b>	SW-6	<b>Lab Sample ID:</b>	1211237-006F
<b>Project Name/Location:</b>	LRT SW Annual 11/30/12	<b>Sample Matrix:</b>	Storm Water
<b>Project Number:</b>			
<b>Date/Time Sampled:</b>	11/30/12 / 9:00		
<b>Tag Number:</b>	LRT SW Annual 11/30/12		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
alpha-BHC	SW8081A	12/3/12	12/05/12	1	0.00335	0.0200	ND		ug/L	412908	7335
gamma-BHC	SW8081A	12/3/12	12/05/12	1	0.00269	0.0200	ND		ug/L	412908	7335
beta-BHC	SW8081A	12/3/12	12/05/12	1	0.00252	0.0200	ND		ug/L	412908	7335
delta-BHC	SW8081A	12/3/12	12/05/12	1	0.00220	0.0200	ND		ug/L	412908	7335
Heptachlor	SW8081A	12/3/12	12/05/12	1	0.00249	0.0200	ND		ug/L	412908	7335
Aldrin	SW8081A	12/3/12	12/05/12	1	0.00272	0.0200	ND		ug/L	412908	7335
Heptachlor epoxide	SW8081A	12/3/12	12/05/12	1	0.00150	0.0200	ND		ug/L	412908	7335
gamma-Chlordane	SW8081A	12/3/12	12/05/12	1	0.00322	0.0200	ND		ug/L	412908	7335
alpha-Chlordane	SW8081A	12/3/12	12/05/12	1	0.00124	0.0200	ND		ug/L	412908	7335
Endosulfan I	SW8081A	12/3/12	12/05/12	1	0.00486	0.0200	ND		ug/L	412908	7335
4,4'-DDE	SW8081A	12/3/12	12/05/12	1	0.00124	0.0200	ND		ug/L	412908	7335
Dieldrin	SW8081A	12/3/12	12/05/12	1	0.00182	0.0200	ND		ug/L	412908	7335
Endrin	SW8081A	12/3/12	12/05/12	1	0.00111	0.0200	ND		ug/L	412908	7335
4,4'-DDD	SW8081A	12/3/12	12/05/12	1	0.00109	0.0200	ND		ug/L	412908	7335
Endosulfan II	SW8081A	12/3/12	12/05/12	1	0.00152	0.0200	ND		ug/L	412908	7335
4,4'-DDT	SW8081A	12/3/12	12/05/12	1	0.00287	0.0200	0.024		ug/L	412908	7335
Endrin aldehyde	SW8081A	12/3/12	12/05/12	1	0.00580	0.0200	ND		ug/L	412908	7335
Endosulfan sulfate	SW8081A	12/3/12	12/05/12	1	0.00162	0.0200	ND		ug/L	412908	7335
Methoxychlor	SW8081A	12/3/12	12/05/12	1	0.00658	0.0500	ND		ug/L	412908	7335
Endrin Ketone	SW8081A	12/3/12	12/05/12	1	0.00336	0.0200	ND		ug/L	412908	7335
Chlordane	SW8081A	12/3/12	12/05/12	1	0.13	0.250	ND		ug/L	412908	7335
Toxaphene	SW8081A	12/3/12	12/05/12	1	0.31	1	ND		ug/L	412908	7335
TCMX (S)	SW8081A	12/3/12	12/05/12	1	40.3	118	73.3		%	412908	7335
DCBP (S)	SW8081A	12/3/12	12/05/12	1	52	116	86.3		%	412908	7335



## SAMPLE RESULTS

Report prepared for: Helen Mawhinney  
Environmental Technical Services

Date Received: 11/30/12  
Date Reported: 12/17/12

Client Sample ID:	SW-7	Lab Sample ID:	1211237-007A
Project Name/Location:	LRT SW Annual 11/30/12	Sample Matrix:	Storm Water
Project Number:			
Date/Time Sampled:	11/30/12 / 8:50		
Tag Number:	LRT SW Annual 11/30/12		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
Specific Conductance	E120.1	NA	11/30/12	1	1	2.0	130		umhos/cm	412926	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
pH	SM4500HB	NA	11/30/12	1	0.10	2.00	7.62		S.U.	412927	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
Total Suspended Solids	E160.2	NA	12/11/12	1	0.2	2	ND		mg/L	413060	NA



## SAMPLE RESULTS

Report prepared for: Helen Mawhinney  
Environmental Technical Services

Date Received: 11/30/12  
Date Reported: 12/17/12

Client Sample ID:	SW-7	Lab Sample ID:	1211237-007B
Project Name/Location:	LRT SW Annual 11/30/12	Sample Matrix:	Storm Water
Project Number:			
Date/Time Sampled:	11/30/12 / 8:50		
Tag Number:	LRT SW Annual 11/30/12		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
Total Organic Carbon	E415.1	NA	12/10/12	1	0.30	0.50	2.8		mg/L	412983	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
MTBE	SW8260B	NA	12/12/12	1	0.17	0.50	ND		ug/L	413048	NA
Benzene	SW8260B	NA	12/12/12	1	0.087	0.50	ND		ug/L	413048	NA
Toluene	SW8260B	NA	12/12/12	1	0.059	0.50	ND		ug/L	413048	NA
Ethyl Benzene	SW8260B	NA	12/12/12	1	0.074	0.50	ND		ug/L	413048	NA
m,p-Xylene	SW8260B	NA	12/12/12	1	0.13	1.0	ND		ug/L	413048	NA
o-Xylene	SW8260B	NA	12/12/12	1	0.076	0.50	ND		ug/L	413048	NA
(S) Dibromofluoromethane	SW8260B	NA	12/12/12	1	61.2	131	84.3		%	413048	NA
(S) Toluene-d8	SW8260B	NA	12/12/12	1	75.1	127	86.7		%	413048	NA
(S) 4-Bromofluorobenzene	SW8260B	NA	12/12/12	1	64.1	120	99.6		%	413048	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH(Gasoline)	8260TPH	NA	12/12/12	1	31	50	ND		ug/L	413047	NA
(S) 4-Bromofluorobenzene	8260TPH	NA	12/12/12	1	41.5	125	66.3		%	413047	NA



## SAMPLE RESULTS

Report prepared for: Helen Mawhinney  
Environmental Technical Services

Date Received: 11/30/12  
Date Reported: 12/17/12

Client Sample ID:	SW-7	Lab Sample ID:	1211237-007C
Project Name/Location:	LRT SW Annual 11/30/12	Sample Matrix:	Storm Water
Project Number:			
Date/Time Sampled:	11/30/12 / 8:50		
Tag Number:	LRT SW Annual 11/30/12		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
Total Oil and Grease	E1664A	12/3/12	12/04/12	1	1.0	5.0	ND		mg/L	412881	7309

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH as Motor Oil	SW8015B(M)	12/3/12	12/04/12	1	0.0900	0.40	ND		mg/L	412876	7296
Pentacosane (S)	SW8015B(M)	12/3/12	12/04/12	1	64.2	123	94.2		%	412876	7296



## SAMPLE RESULTS

Report prepared for: Helen Mawhinney  
Environmental Technical Services

Date Received: 11/30/12  
Date Reported: 12/17/12

Client Sample ID:	SW-7	Lab Sample ID:	1211237-007D
Project Name/Location:	LRT SW Annual 11/30/12	Sample Matrix:	Storm Water
Project Number:			
Date/Time Sampled:	11/30/12 / 8:50		
Tag Number:	LRT SW Annual 11/30/12		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
COD	H8000	12/5/12	12/05/12	1	8.0	20	ND		mg/L	412938	7356



## SAMPLE RESULTS

Report prepared for: Helen Mawhinney  
Environmental Technical Services

Date Received: 11/30/12  
Date Reported: 12/17/12

Client Sample ID:	SW-7	Lab Sample ID:	1211237-007E
Project Name/Location:	LRT SW Annual 11/30/12	Sample Matrix:	Storm Water
Project Number:			
Date/Time Sampled:	11/30/12 / 8:50		
Tag Number:	LRT SW Annual 11/30/12		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
Iron	E200.7	12/3/12	12/04/12	1	0.002	0.10	0.31		mg/L	412856	7300
Aluminum	E200.7	12/3/12	12/04/12	1	0.004	0.30	ND		mg/L	412856	7300
Copper	E200.7	12/3/12	12/04/12	1	0.003	0.010	ND		mg/L	412856	7300
Lead	E200.7	12/3/12	12/04/12	1	0.005	0.015	ND		mg/L	412856	7300
Vanadium	E200.7	12/3/12	12/04/12	1	0.004	0.010	ND		mg/L	412856	7300
Zinc	E200.7	12/3/12	12/04/12	1	0.002	0.010	0.030		mg/L	412856	7300



## SAMPLE RESULTS

Report prepared for: Helen Mawhinney  
Environmental Technical Services

Date Received: 11/30/12  
Date Reported: 12/17/12

Client Sample ID:	SW-7	Lab Sample ID:	1211237-007F
Project Name/Location:	LRT SW Annual 11/30/12	Sample Matrix:	Storm Water
Project Number:			
Date/Time Sampled:	11/30/12 / 8:50		
Tag Number:	LRT SW Annual 11/30/12		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
alpha-BHC	SW8081A	12/3/12	12/05/12	1	0.00335	0.0200	ND		ug/L	412908	7335
gamma-BHC	SW8081A	12/3/12	12/05/12	1	0.00269	0.0200	ND		ug/L	412908	7335
beta-BHC	SW8081A	12/3/12	12/05/12	1	0.00252	0.0200	ND		ug/L	412908	7335
delta-BHC	SW8081A	12/3/12	12/05/12	1	0.00220	0.0200	ND		ug/L	412908	7335
Heptachlor	SW8081A	12/3/12	12/05/12	1	0.00249	0.0200	ND		ug/L	412908	7335
Aldrin	SW8081A	12/3/12	12/05/12	1	0.00272	0.0200	ND		ug/L	412908	7335
Heptachlor epoxide	SW8081A	12/3/12	12/05/12	1	0.00150	0.0200	ND		ug/L	412908	7335
gamma-Chlordane	SW8081A	12/3/12	12/05/12	1	0.00322	0.0200	ND		ug/L	412908	7335
alpha-Chlordane	SW8081A	12/3/12	12/05/12	1	0.00124	0.0200	ND		ug/L	412908	7335
Endosulfan I	SW8081A	12/3/12	12/05/12	1	0.00486	0.0200	ND		ug/L	412908	7335
4,4'-DDE	SW8081A	12/3/12	12/05/12	1	0.00124	0.0200	ND		ug/L	412908	7335
Dieldrin	SW8081A	12/3/12	12/05/12	1	0.00182	0.0200	ND		ug/L	412908	7335
Endrin	SW8081A	12/3/12	12/05/12	1	0.00111	0.0200	ND		ug/L	412908	7335
4,4'-DDD	SW8081A	12/3/12	12/05/12	1	0.00109	0.0200	ND		ug/L	412908	7335
Endosulfan II	SW8081A	12/3/12	12/05/12	1	0.00152	0.0200	ND		ug/L	412908	7335
4,4'-DDT	SW8081A	12/3/12	12/05/12	1	0.00287	0.0200	ND		ug/L	412908	7335
Endrin aldehyde	SW8081A	12/3/12	12/05/12	1	0.00580	0.0200	ND		ug/L	412908	7335
Endosulfan sulfate	SW8081A	12/3/12	12/05/12	1	0.00162	0.0200	ND		ug/L	412908	7335
Methoxychlor	SW8081A	12/3/12	12/05/12	1	0.00658	0.0500	ND		ug/L	412908	7335
Endrin Ketone	SW8081A	12/3/12	12/05/12	1	0.00336	0.0200	ND		ug/L	412908	7335
Chlordane	SW8081A	12/3/12	12/05/12	1	0.13	0.250	ND		ug/L	412908	7335
Toxaphene	SW8081A	12/3/12	12/05/12	1	0.31	1	ND		ug/L	412908	7335
TCMX (S)	SW8081A	12/3/12	12/05/12	1	40.3	118	79.1		%	412908	7335
DCBP (S)	SW8081A	12/3/12	12/05/12	1	52	116	86.8		%	412908	7335





## SAMPLE RESULTS

Report prepared for: Helen Mawhinney  
Environmental Technical Services

Date Received: 11/30/12  
Date Reported: 12/17/12

Client Sample ID:	S PARR SW-11	Lab Sample ID:	1211237-008A
Project Name/Location:	LRT SW Annual 11/30/12	Sample Matrix:	Storm Water
Project Number:			
Date/Time Sampled:	11/30/12 / 7:10		
Tag Number:	LRT SW Annual 11/30/12		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
Specific Conductance	E120.1	NA	11/30/12	1	1	2.0	170		umhos/cm	412926	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
pH	SM4500HB	NA	11/30/12	1	0.10	2.00	7.96		S.U.	412927	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
Total Suspended Solids	E160.2	NA	12/11/12	1	0.2	2	15		mg/L	413060	NA



## SAMPLE RESULTS

Report prepared for: Helen Mawhinney  
Environmental Technical Services

Date Received: 11/30/12  
Date Reported: 12/17/12

Client Sample ID:	S PARR SW-11	Lab Sample ID:	1211237-008B
Project Name/Location:	LRT SW Annual 11/30/12	Sample Matrix:	Storm Water
Project Number:			
Date/Time Sampled:	11/30/12 / 7:10		
Tag Number:	LRT SW Annual 11/30/12		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
Total Organic Carbon	E415.1	NA	12/10/12	1	0.30	0.50	ND		mg/L	412983	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
MTBE	SW8260B	NA	12/12/12	1	0.17	0.50	ND		ug/L	413048	NA
Benzene	SW8260B	NA	12/12/12	1	0.087	0.50	ND		ug/L	413048	NA
Toluene	SW8260B	NA	12/12/12	1	0.059	0.50	ND		ug/L	413048	NA
Ethyl Benzene	SW8260B	NA	12/12/12	1	0.074	0.50	ND		ug/L	413048	NA
m,p-Xylene	SW8260B	NA	12/12/12	1	0.13	1.0	ND		ug/L	413048	NA
o-Xylene	SW8260B	NA	12/12/12	1	0.076	0.50	ND		ug/L	413048	NA
(S) Dibromofluoromethane	SW8260B	NA	12/12/12	1	61.2	131	84.9		%	413048	NA
(S) Toluene-d8	SW8260B	NA	12/12/12	1	75.1	127	87.6		%	413048	NA
(S) 4-Bromofluorobenzene	SW8260B	NA	12/12/12	1	64.1	120	101		%	413048	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH(Gasoline)	8260TPH	NA	12/12/12	1	31	50	ND		ug/L	413047	NA
(S) 4-Bromofluorobenzene	8260TPH	NA	12/12/12	1	41.5	125	64.5		%	413047	NA



## SAMPLE RESULTS

Report prepared for: Helen Mawhinney  
Environmental Technical Services

Date Received: 11/30/12  
Date Reported: 12/17/12

Client Sample ID:	S PARR SW-11	Lab Sample ID:	1211237-008C
Project Name/Location:	LRT SW Annual 11/30/12	Sample Matrix:	Storm Water
Project Number:			
Date/Time Sampled:	11/30/12 / 7:10		
Tag Number:	LRT SW Annual 11/30/12		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
Total Oil and Grease	E1664A	12/3/12	12/04/12	1	1.0	5.0	ND		mg/L	412881	7309

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH as Motor Oil	SW8015B(M)	12/3/12	12/04/12	1	0.0900	0.40	ND		mg/L	412876	7296
Pentacosane (S)	SW8015B(M)	12/3/12	12/04/12	1	64.2	123	88.7		%	412876	7296



## SAMPLE RESULTS

Report prepared for: Helen Mawhinney  
Environmental Technical Services

Date Received: 11/30/12  
Date Reported: 12/17/12

Client Sample ID:	S PARR SW-11	Lab Sample ID:	1211237-008D
Project Name/Location:	LRT SW Annual 11/30/12	Sample Matrix:	Storm Water
Project Number:			
Date/Time Sampled:	11/30/12 / 7:10		
Tag Number:	LRT SW Annual 11/30/12		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
COD	H8000	12/5/12	12/05/12	1	8.0	20	ND		mg/L	412938	7356



## SAMPLE RESULTS

Report prepared for: Helen Mawhinney  
Environmental Technical Services

Date Received: 11/30/12  
Date Reported: 12/17/12

Client Sample ID:	S PARR SW-11	Lab Sample ID:	1211237-008E
Project Name/Location:	LRT SW Annual 11/30/12	Sample Matrix:	Storm Water
Project Number:			
Date/Time Sampled:	11/30/12 / 7:10		
Tag Number:	LRT SW Annual 11/30/12		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
Iron	E200.7	12/3/12	12/04/12	1	0.002	0.10	0.67		mg/L	412856	7300
Aluminum	E200.7	12/3/12	12/04/12	1	0.004	0.30	ND		mg/L	412856	7300
Copper	E200.7	12/3/12	12/04/12	1	0.003	0.010	ND		mg/L	412856	7300
Lead	E200.7	12/3/12	12/04/12	1	0.005	0.015	ND		mg/L	412856	7300
Vanadium	E200.7	12/3/12	12/04/12	1	0.004	0.010	0.020		mg/L	412856	7300
Zinc	E200.7	12/3/12	12/04/12	1	0.002	0.010	0.021		mg/L	412856	7300



## SAMPLE RESULTS

**Report prepared for:** Helen Mawhinney  
Environmental Technical Services

**Date Received:** 11/30/12  
**Date Reported:** 12/17/12

<b>Client Sample ID:</b>	S PARR SW-11	<b>Lab Sample ID:</b>	1211237-008F
<b>Project Name/Location:</b>	LRT SW Annual 11/30/12	<b>Sample Matrix:</b>	Storm Water
<b>Project Number:</b>			
<b>Date/Time Sampled:</b>	11/30/12 / 7:10		
<b>Tag Number:</b>	LRT SW Annual 11/30/12		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
alpha-BHC	SW8081A	12/3/12	12/05/12	4	0.0134	0.0800	ND		ug/L	412908	7335
gamma-BHC	SW8081A	12/3/12	12/05/12	4	0.0107	0.0800	ND		ug/L	412908	7335
beta-BHC	SW8081A	12/3/12	12/05/12	4	0.0101	0.0800	ND		ug/L	412908	7335
delta-BHC	SW8081A	12/3/12	12/05/12	4	0.00878	0.0800	ND		ug/L	412908	7335
Heptachlor	SW8081A	12/3/12	12/05/12	4	0.00994	0.0800	ND		ug/L	412908	7335
Aldrin	SW8081A	12/3/12	12/05/12	4	0.0109	0.0800	ND		ug/L	412908	7335
Heptachlor epoxide	SW8081A	12/3/12	12/05/12	4	0.00600	0.0800	ND		ug/L	412908	7335
gamma-Chlordane	SW8081A	12/3/12	12/05/12	4	0.0129	0.0800	ND		ug/L	412908	7335
alpha-Chlordane	SW8081A	12/3/12	12/05/12	4	0.00494	0.0800	ND		ug/L	412908	7335
Endosulfan I	SW8081A	12/3/12	12/05/12	4	0.0194	0.0800	ND		ug/L	412908	7335
4,4'-DDE	SW8081A	12/3/12	12/05/12	4	0.00494	0.0800	ND		ug/L	412908	7335
Dieldrin	SW8081A	12/3/12	12/05/12	4	0.00726	0.0800	ND		ug/L	412908	7335
Endrin	SW8081A	12/3/12	12/05/12	4	0.00444	0.0800	ND		ug/L	412908	7335
4,4'-DDD	SW8081A	12/3/12	12/05/12	4	0.00436	0.0800	ND		ug/L	412908	7335
Endosulfan II	SW8081A	12/3/12	12/05/12	4	0.00608	0.0800	ND		ug/L	412908	7335
4,4'-DDT	SW8081A	12/3/12	12/05/12	4	0.0115	0.0800	ND		ug/L	412908	7335
Endrin aldehyde	SW8081A	12/3/12	12/05/12	4	0.0232	0.0800	ND		ug/L	412908	7335
Endosulfan sulfate	SW8081A	12/3/12	12/05/12	4	0.00648	0.0800	ND		ug/L	412908	7335
Methoxychlor	SW8081A	12/3/12	12/05/12	4	0.0263	0.200	ND		ug/L	412908	7335
Endrin Ketone	SW8081A	12/3/12	12/05/12	4	0.0134	0.0800	ND		ug/L	412908	7335
Chlordane	SW8081A	12/3/12	12/05/12	4	0.52	1.00	ND		ug/L	412908	7335
Toxaphene	SW8081A	12/3/12	12/05/12	4	1.2	4	ND		ug/L	412908	7335
TCMX (S)	SW8081A	12/3/12	12/05/12	4	40.3	118	95.8		%	412908	7335
DCBP (S)	SW8081A	12/3/12	12/05/12	4	52	116	106		%	412908	7335

**NOTE:** Reporting limits increased due to the nature of the sample matrix (dark color extract).



## SAMPLE RESULTS

Report prepared for: Helen Mawhinney  
Environmental Technical Services

Date Received: 11/30/12  
Date Reported: 12/17/12

Client Sample ID:	S PARR SW-12	Lab Sample ID:	1211237-009A
Project Name/Location:	LRT SW Annual 11/30/12	Sample Matrix:	Storm Water
Project Number:			
Date/Time Sampled:	11/30/12 / 7:40		
Tag Number:	LRT SW Annual 11/30/12		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
Specific Conductance	E120.1	NA	11/30/12	1	1	2.0	65		umhos/cm	412926	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
pH	SM4500HB	NA	11/30/12	1	0.10	2.00	9.17		S.U.	412927	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
Total Suspended Solids	E160.2	NA	12/11/12	1	0.5	5	390		mg/L	413060	NA





## SAMPLE RESULTS

Report prepared for: Helen Mawhinney  
Environmental Technical Services

Date Received: 11/30/12  
Date Reported: 12/17/12

Client Sample ID:	S PARR SW-12	Lab Sample ID:	1211237-009B
Project Name/Location:	LRT SW Annual 11/30/12	Sample Matrix:	Storm Water
Project Number:			
Date/Time Sampled:	11/30/12 / 7:40		
Tag Number:	LRT SW Annual 11/30/12		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
Total Organic Carbon	E415.1	NA	12/10/12	1	0.30	0.50	0.63		mg/L	412983	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
MTBE	SW8260B	NA	12/12/12	1	0.17	0.50	ND		ug/L	413048	NA
Benzene	SW8260B	NA	12/12/12	1	0.087	0.50	ND		ug/L	413048	NA
Toluene	SW8260B	NA	12/12/12	1	0.059	0.50	ND		ug/L	413048	NA
Ethyl Benzene	SW8260B	NA	12/12/12	1	0.074	0.50	ND		ug/L	413048	NA
m,p-Xylene	SW8260B	NA	12/12/12	1	0.13	1.0	ND		ug/L	413048	NA
o-Xylene	SW8260B	NA	12/12/12	1	0.076	0.50	ND		ug/L	413048	NA
(S) Dibromofluoromethane	SW8260B	NA	12/12/12	1	61.2	131	86.7		%	413048	NA
(S) Toluene-d8	SW8260B	NA	12/12/12	1	75.1	127	88.7		%	413048	NA
(S) 4-Bromofluorobenzene	SW8260B	NA	12/12/12	1	64.1	120	101		%	413048	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH(Gasoline)	8260TPH	NA	12/12/12	1	31	50	ND		ug/L	413047	NA
(S) 4-Bromofluorobenzene	8260TPH	NA	12/12/12	1	41.5	125	60.2		%	413047	NA



## SAMPLE RESULTS

Report prepared for: Helen Mawhinney  
Environmental Technical Services

Date Received: 11/30/12  
Date Reported: 12/17/12

Client Sample ID:	S PARR SW-12	Lab Sample ID:	1211237-009C
Project Name/Location:	LRT SW Annual 11/30/12	Sample Matrix:	Storm Water
Project Number:			
Date/Time Sampled:	11/30/12 / 7:40		
Tag Number:	LRT SW Annual 11/30/12		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
Total Oil and Grease	E1664A	12/3/12	12/04/12	1	1.0	5.0	ND		mg/L	412881	7309

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH as Motor Oil	SW8015B(M)	12/3/12	12/04/12	1	0.0900	0.40	ND		mg/L	412876	7296
Pentacosane (S)	SW8015B(M)	12/3/12	12/04/12	1	64.2	123	78.7		%	412876	7296



## SAMPLE RESULTS

Report prepared for: Helen Mawhinney  
Environmental Technical Services

Date Received: 11/30/12  
Date Reported: 12/17/12

Client Sample ID:	S PARR SW-12	Lab Sample ID:	1211237-009D
Project Name/Location:	LRT SW Annual 11/30/12	Sample Matrix:	Storm Water
Project Number:			
Date/Time Sampled:	11/30/12 / 7:40		
Tag Number:	LRT SW Annual 11/30/12		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
COD	H8000	12/5/12	12/05/12	1	8.0	20	ND		mg/L	412938	7356



## SAMPLE RESULTS

Report prepared for: Helen Mawhinney  
Environmental Technical Services

Date Received: 11/30/12  
Date Reported: 12/17/12

Client Sample ID:	S PARR SW-12	Lab Sample ID:	1211237-009E
Project Name/Location:	LRT SW Annual 11/30/12	Sample Matrix:	Storm Water
Project Number:			
Date/Time Sampled:	11/30/12 / 7:40		
Tag Number:	LRT SW Annual 11/30/12		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
Iron	E200.7	12/3/12	12/04/12	1	0.002	0.10	23		mg/L	412856	7300
Aluminum	E200.7	12/3/12	12/04/12	1	0.004	0.30	15		mg/L	412856	7300
Copper	E200.7	12/3/12	12/04/12	1	0.003	0.010	0.039		mg/L	412856	7300
Lead	E200.7	12/3/12	12/04/12	1	0.005	0.015	0.044		mg/L	412856	7300
Vanadium	E200.7	12/3/12	12/04/12	1	0.004	0.010	0.046		mg/L	412856	7300
Zinc	E200.7	12/3/12	12/04/12	1	0.002	0.010	0.20		mg/L	412856	7300



## SAMPLE RESULTS

**Report prepared for:** Helen Mawhinney  
Environmental Technical Services

**Date Received:** 11/30/12  
**Date Reported:** 12/17/12

<b>Client Sample ID:</b>	S PARR SW-12	<b>Lab Sample ID:</b>	1211237-009F
<b>Project Name/Location:</b>	LRT SW Annual 11/30/12	<b>Sample Matrix:</b>	Storm Water
<b>Project Number:</b>			
<b>Date/Time Sampled:</b>	11/30/12 / 7:40		
<b>Tag Number:</b>	LRT SW Annual 11/30/12		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
alpha-BHC	SW8081A	12/3/12	12/05/12	1	0.00335	0.0200	ND		ug/L	412908	7335
gamma-BHC	SW8081A	12/3/12	12/05/12	1	0.00269	0.0200	ND		ug/L	412908	7335
beta-BHC	SW8081A	12/3/12	12/05/12	1	0.00252	0.0200	ND		ug/L	412908	7335
delta-BHC	SW8081A	12/3/12	12/05/12	1	0.00220	0.0200	ND		ug/L	412908	7335
Heptachlor	SW8081A	12/3/12	12/05/12	1	0.00249	0.0200	ND		ug/L	412908	7335
Aldrin	SW8081A	12/3/12	12/05/12	1	0.00272	0.0200	ND		ug/L	412908	7335
Heptachlor epoxide	SW8081A	12/3/12	12/05/12	1	0.00150	0.0200	ND		ug/L	412908	7335
gamma-Chlordane	SW8081A	12/3/12	12/05/12	1	0.00322	0.0200	ND		ug/L	412908	7335
alpha-Chlordane	SW8081A	12/3/12	12/05/12	1	0.00124	0.0200	ND		ug/L	412908	7335
Endosulfan I	SW8081A	12/3/12	12/05/12	1	0.00486	0.0200	ND		ug/L	412908	7335
4,4'-DDE	SW8081A	12/3/12	12/05/12	1	0.00124	0.0200	ND		ug/L	412908	7335
Dieldrin	SW8081A	12/3/12	12/05/12	1	0.00182	0.0200	ND		ug/L	412908	7335
Endrin	SW8081A	12/3/12	12/05/12	1	0.00111	0.0200	ND		ug/L	412908	7335
4,4'-DDD	SW8081A	12/3/12	12/05/12	1	0.00109	0.0200	ND		ug/L	412908	7335
Endosulfan II	SW8081A	12/3/12	12/05/12	1	0.00152	0.0200	ND		ug/L	412908	7335
4,4'-DDT	SW8081A	12/3/12	12/05/12	1	0.00287	0.0200	ND		ug/L	412908	7335
Endrin aldehyde	SW8081A	12/3/12	12/05/12	1	0.00580	0.0200	ND		ug/L	412908	7335
Endosulfan sulfate	SW8081A	12/3/12	12/05/12	1	0.00162	0.0200	ND		ug/L	412908	7335
Methoxychlor	SW8081A	12/3/12	12/05/12	1	0.00658	0.0500	ND		ug/L	412908	7335
Endrin Ketone	SW8081A	12/3/12	12/05/12	1	0.00336	0.0200	ND		ug/L	412908	7335
Chlordane	SW8081A	12/3/12	12/05/12	1	0.13	0.250	ND		ug/L	412908	7335
Toxaphene	SW8081A	12/3/12	12/05/12	1	0.31	1	ND		ug/L	412908	7335
TCMX (S)	SW8081A	12/3/12	12/05/12	1	40.3	118	88.9		%	412908	7335
DCBP (S)	SW8081A	12/3/12	12/05/12	1	52	116	92.9		%	412908	7335



## MB Summary Report

<b>Work Order:</b>	1211237	<b>Prep Method:</b>	NA	<b>Prep Date:</b>	NA	<b>Prep Batch:</b>	NA
<b>Matrix:</b>	Water	<b>Analytical Method:</b>	E120.1	<b>Analyzed Date:</b>	11/30/12	<b>Analytical Batch:</b>	412926
<b>Units:</b>	umhos/cm						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
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Specific Conductance 1 2.0 ND

<b>Work Order:</b>	1211237	<b>Prep Method:</b>	NA	<b>Prep Date:</b>	NA	<b>Prep Batch:</b>	NA
<b>Matrix:</b>	Water	<b>Analytical Method:</b>	E415.1	<b>Analyzed Date:</b>	12/10/12	<b>Analytical Batch:</b>	412983
<b>Units:</b>	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
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Total Organic Carbon 0.31 0.50 ND

<b>Work Order:</b>	1211237	<b>Prep Method:</b>	NA	<b>Prep Date:</b>	NA	<b>Prep Batch:</b>	NA
<b>Matrix:</b>	Water	<b>Analytical Method:</b>	8260TPH	<b>Analyzed Date:</b>	12/12/12	<b>Analytical Batch:</b>	413047
<b>Units:</b>	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
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TPH(Gasoline) 31 50 ND  
(S) 4-Bromofluorobenzene 77.5



## MB Summary Report

<b>Work Order:</b>	1211237	<b>Prep Method:</b>	NA	<b>Prep Date:</b>	NA	<b>Prep Batch:</b>	NA
<b>Matrix:</b>	Water	<b>Analytical Method:</b>	SW8260B	<b>Analyzed Date:</b>	12/12/12	<b>Analytical Batch:</b>	413048
<b>Units:</b>	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier
Dichlorodifluoromethane	0.18	0.50	ND	
Chloromethane	0.16	0.50	ND	
Vinyl Chloride	0.16	0.50	ND	
Bromomethane	0.18	0.50	ND	
Trichlorofluoromethane	0.18	0.50	ND	
1,1-Dichloroethene	0.15	0.50	ND	
Freon 113	0.19	0.50	ND	
Methylene Chloride	0.23	5.0	2.5	
trans-1,2-Dichloroethene	0.19	0.50	ND	
MTBE	0.17	0.50	ND	
tert-Butanol	1.5	5.0	ND	
Diisopropyl ether (DIPE)	0.13	0.50	ND	
1,1-Dichloroethane	0.13	0.50	ND	
ETBE	0.17	0.50	ND	
cis-1,2-Dichloroethene	0.19	0.50	ND	
2,2-Dichloropropane	0.15	0.50	ND	
Bromochloromethane	0.20	0.50	ND	
Chloroform	0.13	0.50	ND	
Carbon Tetrachloride	0.15	0.50	ND	
1,1,1-Trichloroethane	0.097	0.50	ND	
1,1-Dichloropropene	0.15	0.50	ND	
Benzene	0.13	0.50	ND	
TAME	0.17	0.50	ND	
1,2-Dichloroethane	0.14	0.50	ND	
Trichloroethylene	0.13	0.50	ND	
Dibromomethane	0.15	0.50	ND	
1,2-Dichloropropane	0.17	0.50	ND	
Bromodichloromethane	0.13	0.50	ND	
cis-1,3-Dichloropropene	0.096	0.50	ND	
Toluene	0.14	0.50	ND	
Tetrachloroethylene	0.14	0.50	ND	
trans-1,3-Dichloropropene	0.23	0.50	ND	
1,1,2-Trichloroethane	0.14	0.50	ND	
Dibromochloromethane	0.096	0.50	ND	
1,3-Dichloropropane	0.10	0.50	ND	
1,2-Dibromoethane	0.19	0.50	ND	
Chlorobenzene	0.14	0.50	ND	
Ethyl Benzene	0.15	0.50	ND	
1,1,1,2-Tetrachloroethane	0.096	0.50	ND	
m,p-Xylene	0.13	1.0	ND	
o-Xylene	0.15	0.50	ND	





## MB Summary Report

<b>Work Order:</b>	1211237	<b>Prep Method:</b>	NA	<b>Prep Date:</b>	NA	<b>Prep Batch:</b>	NA
<b>Matrix:</b>	Water	<b>Analytical Method:</b>	SW8260B	<b>Analyzed Date:</b>	12/12/12	<b>Analytical Batch:</b>	413048
<b>Units:</b>	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
Styrene	0.21	0.50	ND		
Bromoform	0.21	1.0	ND		
Isopropyl Benzene	0.097	0.50	ND		
Bromobenzene	0.15	0.50	ND		
1,1,2,2-Tetrachloroethane	0.11	0.50	ND		
n-Propylbenzene	0.078	0.50	ND		
2-Chlorotoluene	0.076	0.50	ND		
1,3,5,-Trimethylbenzene	0.074	0.50	ND		
4-Chlorotoluene	0.088	0.50	ND		
tert-Butylbenzene	0.081	0.50	ND		
1,2,3-Trichloropropane	0.14	0.50	ND		
1,2,4-Trimethylbenzene	0.083	0.50	ND		
sec-Butyl Benzene	0.092	0.50	ND		
p-Isopropyltoluene	0.093	0.50	ND		
1,3-Dichlorobenzene	0.10	0.50	ND		
1,4-Dichlorobenzene	0.069	0.50	ND		
n-Butylbenzene	0.081	0.50	ND		
1,2-Dichlorobenzene	0.057	0.50	ND		
1,2-Dibromo-3-Chloropropane	0.15	0.50	ND		
Hexachlorobutadiene	0.19	0.50	ND		
1,2,4-Trichlorobenzene	0.12	0.50	ND		
Naphthalene	0.14	1.0	ND		
1,2,3-Trichlorobenzene	0.23	0.50	ND		
(S) Dibromofluoromethane			82.3		
(S) Toluene-d8			85.3		
(S) 4-Bromofluorobenzene			95.4		
Ethanol	0.21	0.50	ND	TIC	

<b>Work Order:</b>	1211237	<b>Prep Method:</b>	NA	<b>Prep Date:</b>	NA	<b>Prep Batch:</b>	NA
<b>Matrix:</b>	Water	<b>Analytical Method:</b>	E160.2	<b>Analyzed Date:</b>	12/11/12	<b>Analytical Batch:</b>	413060
<b>Units:</b>	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
Total Suspended Solids	1	10	ND		



## MB Summary Report

<b>Work Order:</b>	1211237	<b>Prep Method:</b>	3510_TPH	<b>Prep Date:</b>	12/03/12	<b>Prep Batch:</b>	7296
<b>Matrix:</b>	Water	<b>Analytical Method:</b>	SW8015B(M)	<b>Analyzed Date:</b>	12/03/12	<b>Analytical Batch:</b>	412854
<b>Units:</b>	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
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TPH as Diesel	0.0440	0.10	ND	
TPH as Motor Oil	0.0920	0.40	0.095	
Pentacosane (S)			88.2	

<b>Work Order:</b>	1211237	<b>Prep Method:</b>	200.7	<b>Prep Date:</b>	12/03/12	<b>Prep Batch:</b>	7300
<b>Matrix:</b>	Water	<b>Analytical Method:</b>	E200.7	<b>Analyzed Date:</b>	12/04/12	<b>Analytical Batch:</b>	412856
<b>Units:</b>	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
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Iron	0.002	0.10	0.0096	
Aluminum	0.004	0.30	0.10	
Copper	0.003	0.010	ND	
Lead	0.005	0.015	ND	
Nickel	0.002	0.010	ND	
Vanadium	0.004	0.010	ND	
Zinc	0.002	0.010	ND	
Silica	0.05	0.20	ND	

<b>Work Order:</b>	1211237	<b>Prep Method:</b>	1664A	<b>Prep Date:</b>	12/03/12	<b>Prep Batch:</b>	7309
<b>Matrix:</b>	Water	<b>Analytical Method:</b>	E1664A	<b>Analyzed Date:</b>	12/03/12	<b>Analytical Batch:</b>	412853
<b>Units:</b>	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
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Total Oil and Grease	1.0	5.0	ND	
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## MB Summary Report

<b>Work Order:</b>	1211237	<b>Prep Method:</b>	3510_TPHSG	<b>Prep Date:</b>	12/04/12	<b>Prep Batch:</b>	7314
<b>Matrix:</b>	Water	<b>Analytical Method:</b>	SW8015B(M)	<b>Analyzed Date:</b>	12/04/12	<b>Analytical Batch:</b>	412876
<b>Units:</b>	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier
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TPH as Diesel (SG)	0.0440	0.10	0.046	
TPH as Motor Oil (SG)	0.0920	0.40	0.11	
Pentacosane (S)			99.7	

<b>Work Order:</b>	1211237	<b>Prep Method:</b>	3510_OCP	<b>Prep Date:</b>	12/03/12	<b>Prep Batch:</b>	7335
<b>Matrix:</b>	Water	<b>Analytical Method:</b>	SW8081A	<b>Analyzed Date:</b>	12/05/12	<b>Analytical Batch:</b>	412908
<b>Units:</b>	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier
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alpha-BHC	0.00336	0.0200	ND	
gamma-BHC	0.00266	0.0200	ND	
beta-BHC	0.00252	0.0200	ND	
delta-BHC	0.00220	0.0200	ND	
Heptachlor	0.00249	0.0200	ND	
Aldrin	0.00272	0.0200	0.0031	
Heptachlor epoxide	0.00150	0.0200	ND	
gamma-Chlordane	0.00322	0.0200	ND	
alpha-Chlordane	0.00227	0.0200	ND	
Endosulfan I	0.00486	0.0200	ND	
4,4'-DDE	0.00124	0.0200	ND	
Dieldrin	0.00182	0.0200	ND	
Endrin	0.00111	0.0200	0.0023	
4,4'-DDD	0.00109	0.0200	ND	
Endosulfan II	0.00152	0.0200	ND	
4,4'-DDT	0.00287	0.0200	ND	
Endrin aldehyde	0.00580	0.0200	ND	
Endosulfan sulfate	0.00162	0.0200	ND	
Methoxychlor	0.00658	0.0500	ND	
Endrin Ketone	0.00336	0.0200	ND	
Chlordane	0.13	0.250	ND	
Toxaphene	0.31	1	ND	
TCMX (S)			82.7	
DCBP (S)			94.2	



## MB Summary Report

<b>Work Order:</b>	1211237	<b>Prep Method:</b>	H8000	<b>Prep Date:</b>	12/05/12	<b>Prep Batch:</b>	7356
<b>Matrix:</b>	Water	<b>Analytical Method:</b>	H8000	<b>Analyzed Date:</b>	12/05/12	<b>Analytical Batch:</b>	412938
<b>Units:</b>	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
COD	8.0	20	ND		



## LCS/LCSD Summary Report

Raw values are used in quality control assessment.

<b>Work Order:</b>	1211237	<b>Prep Method:</b>	NA	<b>Prep Date:</b>	NA	<b>Prep Batch:</b>	NA
<b>Matrix:</b>	Water	<b>Analytical Method:</b>	E415.1	<b>Analyzed Date:</b>	12/10/12	<b>Analytical Batch:</b>	412983
<b>Units:</b>	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
Total Organic Carbon	0.31	0.50	ND	10	96.4	97.4	1.03	80 - 120	20	

<b>Work Order:</b>	1211237	<b>Prep Method:</b>	NA	<b>Prep Date:</b>	NA	<b>Prep Batch:</b>	NA
<b>Matrix:</b>	Water	<b>Analytical Method:</b>	8260TPH	<b>Analyzed Date:</b>	12/12/12	<b>Analytical Batch:</b>	413047
<b>Units:</b>	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
TPH(Gasoline)	31	50	ND	227.27	112	89.4	22.3	52.4 - 127	30	
(S) 4-Bromofluorobenzene			77.5	11.36	82.0	63.1		41.5 - 125		

<b>Work Order:</b>	1211237	<b>Prep Method:</b>	NA	<b>Prep Date:</b>	NA	<b>Prep Batch:</b>	NA
<b>Matrix:</b>	Water	<b>Analytical Method:</b>	SW8260B	<b>Analyzed Date:</b>	12/12/12	<b>Analytical Batch:</b>	413048
<b>Units:</b>	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
1,1-Dichloroethene	0.14	0.50	ND	17.04	104	94.6	9.37	61.4 - 129	30	
Benzene	0.087	0.50	ND	17.04	93.1	82.8	11.9	66.9 - 140	30	
Trichloroethylene	0.057	0.50	ND	17.04	96.3	86.1	11.1	69.3 - 144	30	
Toluene	0.059	0.50	ND	17.04	98.9	88.7	11.1	76.6 - 123	30	
Chlorobenzene	0.068	0.50	ND	17.04	88.8	83.9	5.51	73.9 - 137	30	
(S) Dibromofluoromethane			ND	11.36	78.2	78.4		61.2 - 131		
(S) Toluene-d8			ND	11.36	80.9	81.2		75.1 - 127		
(S) 4-Bromofluorobenzene			2.5	11.36	82.4	86.1		64.1 - 120		

<b>Work Order:</b>	1211237	<b>Prep Method:</b>	3510_TPH	<b>Prep Date:</b>	12/03/12	<b>Prep Batch:</b>	7296
<b>Matrix:</b>	Water	<b>Analytical Method:</b>	SW8015B(M)	<b>Analyzed Date:</b>	12/03/12	<b>Analytical Batch:</b>	412854
<b>Units:</b>	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
TPH as Diesel	0.0440	0.10	ND	1	90.1	77.3	15.3	50.3 - 125	30	
Pentacosane (S)			0.095	100	81.9	77.3		57.9 - 125		



## LCS/LCSD Summary Report

Raw values are used in quality control assessment.

<b>Work Order:</b>	1211237	<b>Prep Method:</b>	200.7	<b>Prep Date:</b>	12/03/12	<b>Prep Batch:</b>	7300
<b>Matrix:</b>	Water	<b>Analytical Method:</b>	E200.7	<b>Analyzed Date:</b>	12/04/12	<b>Analytical Batch:</b>	412856
<b>Units:</b>	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
Iron	0.002	0.10	0.0096	10	106	100	9.52	75 - 125	30	
Aluminum	0.004	0.30	0.10	10	106	99.5	9.98	75 - 125	30	
Copper	0.003	0.010	ND	1	104	100	3.53	80 - 120	30	
Lead	0.005	0.015	ND	1	102	99.4	2.93	80 - 120	30	
Nickel	0.002	0.010	ND	1	104	102	1.56	80 - 120	30	
Vanadium	0.004	0.010	ND	1	104	102	2.34	80 - 120	30	
Zinc	0.002	0.010	ND	1	103	103	0.000	80 - 120	30	
Silica	0.05	0.20	ND	1	102	99.6	2.64	80 - 120	30	

<b>Work Order:</b>	1211237	<b>Prep Method:</b>	1664A	<b>Prep Date:</b>	12/03/12	<b>Prep Batch:</b>	7309
<b>Matrix:</b>	Water	<b>Analytical Method:</b>	E1664A	<b>Analyzed Date:</b>	12/03/12	<b>Analytical Batch:</b>	412853
<b>Units:</b>	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
Total Oil and Grease	1.0	5.0	ND	40	80.0	82.8	3.38	60 - 140	30	

<b>Work Order:</b>	1211237	<b>Prep Method:</b>	3510_TPHSG	<b>Prep Date:</b>	12/04/12	<b>Prep Batch:</b>	7314
<b>Matrix:</b>	Water	<b>Analytical Method:</b>	SW8015B(M)	<b>Analyzed Date:</b>	12/04/12	<b>Analytical Batch:</b>	412876
<b>Units:</b>	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
TPH as Diesel (SG)	0.0440	0.10	0.046	1	58.8	52.8	10.8	36.5 - 91.3	30	
Pentacosane (S)			0.11	100	71.1	69.1		50.8 - 139		



## LCS/LCSD Summary Report

Raw values are used in quality control assessment.

<b>Work Order:</b>	1211237	<b>Prep Method:</b>	3510_OCP	<b>Prep Date:</b>	12/03/12	<b>Prep Batch:</b>	7335
<b>Matrix:</b>	Water	<b>Analytical Method:</b>	SW8081A	<b>Analyzed Date:</b>	12/05/12	<b>Analytical Batch:</b>	412908
<b>Units:</b>	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
gamma-BHC	0.00266	0.0200	ND	0.1	75.2	66.3	12.6	61.6 - 135	30	
Heptachlor	0.00249	0.0200	ND	0.1	83.4	84.3	1.08	60 - 97.8	30	
Aldrin	0.00272	0.0200	ND	0.1	72.3	65.6	9.72	55.3 - 101	30	
Dieldrin	0.00182	0.0200	ND	0.1	88.3	90.5	2.41	60.3 - 116	30	
Endrin	0.00111	0.0200	ND	0.1	90.4	92.5	2.26	60.4 - 134	30	
4,4'-DDT	0.00287	0.0200	0.0031	0.1	94.3	76.1	21.5	58.4 - 126	30	
TCMX (S)			ND	350	72.5	51.4		40.3 - 118		
DCBP (S)			ND	350	88.4	92.4		52 - 116		

<b>Work Order:</b>	1211237	<b>Prep Method:</b>	H8000	<b>Prep Date:</b>	12/05/12	<b>Prep Batch:</b>	7356
<b>Matrix:</b>	Water	<b>Analytical Method:</b>	H8000	<b>Analyzed Date:</b>	12/05/12	<b>Analytical Batch:</b>	412938
<b>Units:</b>	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
COD	8.0	20	ND	100	107	105	1.89	60 - 140	20	



## MS/MSD Summary Report

Raw values are used in quality control assessment.

<b>Work Order:</b>	1211237	<b>Prep Method:</b>	200.7	<b>Prep Date:</b>	12/03/12	<b>Prep Batch:</b>	7300
<b>Matrix:</b>	Water	<b>Analytical Method:</b>	E200.7	<b>Analyzed Date:</b>	12/04/12	<b>Analytical Batch:</b>	412856
<b>Spiked Sample:</b>	1211237-009E						
<b>Units:</b>	mg/L						

Parameters	MDL	PQL	Sample Conc.	Spike Conc.	MS % Recovery	MSD % Recovery	MS/MSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
Iron	0.002	0.10	22.58	10	149	146	2.18	75 - 125	20	S
Aluminum	0.004	0.30	14.91	10	211	205	1.68	75 - 125	20	S
Copper	0.003	0.010	0.0386	1	103	105	1.77	75 - 125	20	
Lead	0.005	0.015	0.0437	1	97.3	96.7	0.592	75 - 125	20	
Vanadium	0.004	0.010	0.0457	1	99.2	99.3	0.0963	75 - 125	20	

<b>Work Order:</b>	1211237	<b>Prep Method:</b>	H8000	<b>Prep Date:</b>	12/05/12	<b>Prep Batch:</b>	7356
<b>Matrix:</b>	Water	<b>Analytical Method:</b>	H8100	<b>Analyzed Date:</b>	12/05/12	<b>Analytical Batch:</b>	412938
<b>Spiked Sample:</b>	1211237-001D						
<b>Units:</b>	mg/L						

Parameters	MDL	PQL	Sample Conc.	Spike Conc.	MS % Recovery	MSD % Recovery	MS/MSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
COD	8.0	20	9	100	98.0	95.0	2.84	60 - 140	30	





## Duplicate QC Summary Report

Work Order:	1211237	Prep Method:	NA	Prep Date:	NA	Prep Batch:	NA
Matrix:	Water	Analytical Method:	E120.1	Analyzed Date:	11/30/12	Analytical Batch:	412926
Units:						Lab Sample ID:	1211234-001A-Dup

Parameters	<u>MDL</u>	<u>PQL</u>	<u>Sample Result</u>	<u>Duplicate Result</u>	<u>% RPD</u>	
Specific Conductance	1	2.0	140	140	3.49	

Work Order:	1211237	Prep Method:	NA	Prep Date:	NA	Prep Batch:	NA
Matrix:	Water	Analytical Method:	SM4500HB	Analyzed Date:	11/30/12	Analytical Batch:	412927
Units:						Lab Sample ID:	1211234-001A-Dup

Parameters	<u>MDL</u>	<u>PQL</u>	<u>Sample Result</u>	<u>Duplicate Result</u>	<u>% RPD</u>	
pH	0.10	2.00	7.76	7.77	0.129	

Work Order:	1211237	Prep Method:	NA	Prep Date:	NA	Prep Batch:	NA
Matrix:	Water	Analytical Method:	E415.1	Analyzed Date:	12/10/12	Analytical Batch:	412983
Units:						Lab Sample ID:	1211239-001B-Dup

Parameters	<u>MDL</u>	<u>PQL</u>	<u>Sample Result</u>	<u>Duplicate Result</u>	<u>% RPD</u>	
Total Organic Carbon	0.30	0.50	0.24	0.22	8.70	

Raw values are used in quality control assessment.



## Laboratory Qualifiers and Definitions

### DEFINITIONS:

<b>Accuracy/Bias (% Recovery)</b> - The closeness of agreement between an observed value and an accepted reference value.
<b>Blank (Method/Preparation Blank)</b> -MB/PB - An analyte-free matrix to which all reagents are added in the same volumes/proportions as used in sample processing. The method blank is used to document contamination resulting from the analytical process.
<b>Duplicate</b> - a field sample and/or laboratory QC sample prepared in duplicate following all of the same processes and procedures used on the original sample (sample duplicate, LCSD, MSD)
<b>Laboratory Control Sample (LCS ad LCSD)</b> - A known matrix spiked with compounds representative of the target analyte(s). This is used to document laboratory performance.
<b>Matrix</b> - the component or substrate that contains the analyte of interest (e.g., - groundwater, sediment, soil, waste water, etc)
<b>Matrix Spike (MS/MSD)</b> - Client sample spiked with identical concentrations of target analyte (s). The spiking occurs prior to the sample preparation and analysis. They are used to document the precision and bias of a method in a given sample matrix.
<b>Method Detection Limit (MDL)</b> - the minimum concentration of a substance that can be measured and reported with a 99% confidence that the analyte concentration is greater than zero
<b>Practical Quantitation Limit (PQL)</b> - a laboratory determined value at 2 to 5 times above the MDL that can be reproduced in a manner that results in a 99% confidence level that the result is both accurate and precise. PQLs reflect all preparation factors and/or dilution factors that have been applied to the sample during the preparation and/or analytical processes.
<b>Precision (%RPD)</b> - The agreement among a set of replicate/duplicate measurements without regard to known value of the replicates
<b>Surrogate (S) or (Surr)</b> - An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples. Surrogates are used in most organic analysis to demonstrate matrix compatibility with the chosen method of analysis
<b>Tentatively Identified Compound (TIC)</b> - A compound not contained within the analytical calibration standards but present in the GCMS library of defined compounds. When the library is searched for an unknown compound, it can frequently give a tentative identification to the compound based on retention time and primary and secondary ion match. TICs are reported as estimates and are candidates for further investigation.
<b>Units:</b> the unit of measure used to express the reported result - <b>mg/L</b> and <b>mg/Kg</b> (equivalent to PPM - parts per million in <b>liquid</b> and <b>solid</b> ), <b>ug/L</b> and <b>ug/Kg</b> (equivalent to PPB - parts per billion in <b>liquid</b> and <b>solid</b> ), <b>ug/m3</b> , <b>mg.m3</b> , <b>ppbv</b> and <b>ppmv</b> (all units of measure for reporting concentrations in air), % (equivalent to 10000 ppm or 1,000,000 ppb), <b>ug/Wipe</b> ( concentration found on the surface of a single Wipe usually taken over a 100cm2 surface)

### LABORATORY QUALIFIERS:

<p><b>B</b> - Indicates when the analyte is found in the associated method or preparation blank</p> <p><b>D</b> - Surrogate is not recoverable due to the necessary dilution of the sample</p> <p><b>E</b> - Indicates the reportable value is outside of the calibration range of the instrument but within the linear range of the instrument (unless otherwise noted) Values reported with an E qualifier should be considered as estimated.</p> <p><b>H</b>- Indicates that the recommended holding time for the analyte or compound has been exceeded</p> <p><b>J</b>- Indicates a value between the method MDL and PQL and that the reported concentration should be considered as estimated rather the quantitative</p> <p><b>NA</b> - Not Analyzed</p> <p><b>N/A</b> - Not Applicable</p> <p><b>NR</b> - Not recoverable - a matrix spike concentration is not recoverable due to a concentration within the original sample that is greater than four times the spike concentration added</p> <p><b>R</b>- The % RPD between a duplicate set of samples is outside of the absolute values established by laboratory control charts</p> <p><b>S</b>- Spike recovery is outside of established method and/or laboratory control limits. Further explanation of the use of this qualifier should be included within a case narrative</p> <p><b>X</b> -Used to indicate that a value based on pattern identification is within the pattern range but not typical of the pattern found in standards. Further explanation may or may not be provided within the sample footnote and/or the case narrative.</p>
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## Sample Receipt Checklist

Client Name: Environmental Technical Services

Date and Time Received: 11/30/2012 13:38

Project Name: LRT SW Annual 11/30/12

Received By: ng

Work Order No.: 1211237

Physically Logged By: ng

Checklist Completed By: ng

Carrier Name: First Courier

### Chain of Custody (COC) Information

Chain of custody present? Yes

Chain of custody signed when relinquished and received? Yes

Chain of custody agrees with sample labels? Yes

Custody seals intact on sample bottles? Not Present

### Sample Receipt Information

Custody seals intact on shipping container/cooler? Not Present

Shipping Container/Cooler In Good Condition? Yes

Samples in proper container/bottle? Yes

Samples containers intact? Yes

Sufficient sample volume for indicated test? Yes

### Sample Preservation and Hold Time (HT) Information

All samples received within holding time? Yes

Container/Temp Blank temperature in compliance? No Temperature: 10 °C

Water-VOA vials have zero headspace? Yes

Water-pH acceptable upon receipt? Yes

pH Checked by: ng pH Adjusted by: no



## Login Summary Report

**Client ID:** TL5744      Environmental Technical Services  
**Project Name:** LRT SW Annual 11/30/12  
**Project # :**  
**Report Due Date:** 12/14/2012  
**Comments:** Metals:Al, Cu, Fe, Pb, Zn, V.  
                          Client specified that "Vn" is for Vanadium. 10day TAT. -KB  
**Work Order # :** 1211237

**QC Level:**  
**TAT Requested:** 10 Day:0  
**Date Received:** 11/30/2012  
**Time Received:** 13:38

<u>WO Sample ID</u>	<u>Client Sample ID</u>	<u>Collection Date/Time</u>	<u>Matrix</u>	<u>Scheduled Disposal</u>	<u>Sample On Hold</u>	<u>Test On Hold</u>	<u>Requested Tests</u>	<u>Subbed</u>
1211237-001A	SW-1	11/30/12 7:00	Water	01/14/13			W_pH_SM4500-H+ B W_TSS_160.2 W_120.1 Cond	
<b>Sample Note:</b> Please use 1 L volume (designated bottle with TSS labeled) for TSS on all samples where pssoble - correct reporting limit based on volume used!								
1211237-001B	SW-1	11/30/12 7:00	Water	01/14/13			W_415.1TOC W_8260MBTEX W_GCMS-GRO	
1211237-001C	SW-1	11/30/12 7:00	Water	01/14/13			W_TOG1664A W_TPHDO	
1211237-001D	SW-1	11/30/12 7:00	Water	01/14/13			W_COD	
1211237-001E	SW-1	11/30/12 7:00	Water	01/14/13			W_200.7Master	
<b>Sample Note:</b> Metals:Al, Cu, Fe, Pb, Zn, V(?).								
1211237-001F	SW-1	11/30/12 7:00	Water	01/14/13			W_8081A_OCP	
1211237-002A	SW-2	11/30/12 7:30	Water	01/14/13			W_pH_SM4500-H+ B W_TSS_160.2 W_120.1 Cond	
1211237-002B	SW-2	11/30/12 7:30	Water	01/14/13			W_415.1TOC W_8260MBTEX W_GCMS-GRO	
1211237-002C	SW-2	11/30/12 7:30	Water	01/14/13			W_TOG1664A W_TPHDO	
1211237-002D	SW-2	11/30/12 7:30	Water	01/14/13			W_COD	
1211237-002E	SW-2	11/30/12 7:30	Water	01/14/13				



## Login Summary Report

**Client ID:** TL5744 Environmental Technical Services  
**Project Name:** LRT SW Annual 11/30/12  
**Project # :**  
**Report Due Date:** 12/14/2012  
**Comments:** Metals:Al, Cu, Fe, Pb, Zn, V.  
Client specified that "Vn" is for Vanadium. 10day TAT. -KB  
**Work Order # :** 1211237

**QC Level:**  
**TAT Requested:** 10 Day:0  
**Date Received:** 11/30/2012  
**Time Received:** 13:38

<u>WO Sample ID</u>	<u>Client Sample ID</u>	<u>Collection Date/Time</u>	<u>Matrix</u>	<u>Scheduled Disposal</u>	<u>Sample On Hold</u>	<u>Test On Hold</u>	<u>Requested Tests</u>	<u>Subbed</u>
1211237-002F	SW-2	11/30/12 7:30	Water	01/14/13			W_200.7Master	
1211237-003A	SW-3	11/30/12 8:30	Water	01/14/13			W_8081A_OCP	
1211237-003B	SW-3	11/30/12 8:30	Water	01/14/13			W_pH_SM4500-H+ B W_120.1 Cond W_TSS_160.2	
1211237-003C	SW-3	11/30/12 8:30	Water	01/14/13			W_415.1TOC W_8260MBTEX W_GCMS-GRO	
1211237-003D	SW-3	11/30/12 8:30	Water	01/14/13			W_TOG1664A W_TPHDO	
1211237-003E	SW-3	11/30/12 8:30	Water	01/14/13			W_COD	
1211237-003F	SW-3	11/30/12 8:30	Water	01/14/13			W_200.7Master	
1211237-004A	SW-4	11/30/12 8:00	Water	01/14/13			W_8081A_OCP	
1211237-004B	SW-4	11/30/12 8:00	Water	01/14/13			W_pH_SM4500-H+ B W_TSS_160.2 W_120.1 Cond	
1211237-004C	SW-4	11/30/12 8:00	Water	01/14/13			W_415.1TOC W_8260MBTEX W_GCMS-GRO	
1211237-004D	SW-4	11/30/12 8:00	Water	01/14/13			W_TOG1664A W_TPHDO	
1211237-004E	SW-4	11/30/12 8:00	Water	01/14/13			W_COD	
							W_200.7Master	



## Login Summary Report

**Client ID:** TL5744 Environmental Technical Services  
**Project Name:** LRT SW Annual 11/30/12  
**Project # :**  
**Report Due Date:** 12/14/2012  
**Comments:** Metals:Al, Cu, Fe, Pb, Zn, V.  
Client specified that "Vn" is for Vanadium. 10day TAT. -KB  
**Work Order # :** 1211237

**QC Level:**  
**TAT Requested:** 10 Day:0  
**Date Received:** 11/30/2012  
**Time Received:** 13:38

<u>WO Sample ID</u>	<u>Client Sample ID</u>	<u>Collection Date/Time</u>	<u>Matrix</u>	<u>Scheduled Disposal</u>	<u>Sample On Hold</u>	<u>Test On Hold</u>	<u>Requested Tests</u>	<u>Subbed</u>
1211237-004F	SW-4	11/30/12 8:00	Water	01/14/13			W_8081A_OCP	
1211237-005A	SW-5	11/30/12 8:30	Water	01/14/13			W_pH_SM4500-H+ B W_TSS_160.2 W_120.1 Cond	
1211237-005B	SW-5	11/30/12 8:30	Water	01/14/13			W_415.1TOC W_GCMS-GRO W_8260MBTEX	
1211237-005C	SW-5	11/30/12 8:30	Water	01/14/13			W_TOG1664A W_TPHDO	
1211237-005D	SW-5	11/30/12 8:30	Water	01/14/13			W_COD	
1211237-005E	SW-5	11/30/12 8:30	Water	01/14/13			W_200.7Master	
1211237-005F	SW-5	11/30/12 8:30	Water	01/14/13			W_8081A_OCP	
1211237-006A	SW-6	11/30/12 9:00	Water	01/14/13			W_pH_SM4500-H+ B W_120.1 Cond W_TSS_160.2	
1211237-006B	SW-6	11/30/12 9:00	Water	01/14/13			W_415.1TOC W_8260MBTEX W_GCMS-GRO	
1211237-006C	SW-6	11/30/12 9:00	Water	01/14/13			W_TOG1664A W_TPHDO	
1211237-006D	SW-6	11/30/12 9:00	Water	01/14/13			W_COD	
1211237-006E	SW-6	11/30/12 9:00	Water	01/14/13			W_200.7Master	
1211237-006F	SW-6	11/30/12 9:00	Water	01/14/13				



## Login Summary Report

**Client ID:** TL5744      Environmental Technical Services  
**Project Name:** LRT SW Annual 11/30/12  
**Project # :**  
**Report Due Date:** 12/14/2012  
**Comments:** Metals:Al, Cu, Fe, Pb, Zn, V.  
                          Client specified that "Vn" is for Vanadium. 10day TAT. -KB  
**Work Order # :** 1211237

**QC Level:**  
**TAT Requested:** 10 Day:0  
**Date Received:** 11/30/2012  
**Time Received:** 13:38

<u>WO Sample ID</u>	<u>Client Sample ID</u>	<u>Collection Date/Time</u>	<u>Matrix</u>	<u>Scheduled Disposal</u>	<u>Sample On Hold</u>	<u>Test On Hold</u>	<u>Requested Tests</u>	<u>Subbed</u>
1211237-007A	SW-7	11/30/12 8:50	Water	01/14/13			W_8081A_OCP W_pH_SM4500-H+ B W_TSS_160.2 W_120.1 Cond	
1211237-007B	SW-7	11/30/12 8:50	Water	01/14/13			W_415.1TOC W_8260MBTEX W_GCMS-GRO	
1211237-007C	SW-7	11/30/12 8:50	Water	01/14/13			W_TOG1664A W_TPHDO	
1211237-007D	SW-7	11/30/12 8:50	Water	01/14/13			W_COD	
1211237-007E	SW-7	11/30/12 8:50	Water	01/14/13			W_200.7Master	
1211237-007F	SW-7	11/30/12 8:50	Water	01/14/13			W_8081A_OCP	
1211237-008A	S PARR SW-11	11/30/12 7:10	Water	01/14/13			W_pH_SM4500-H+ B W_120.1 Cond W_TSS_160.2	
1211237-008B	S PARR SW-11	11/30/12 7:10	Water	01/14/13			W_415.1TOC W_8260MBTEX W_GCMS-GRO	
1211237-008C	S PARR SW-11	11/30/12 7:10	Water	01/14/13			W_TOG1664A W_TPHDO	
1211237-008D	S PARR SW-11	11/30/12 7:10	Water	01/14/13			W_COD	
<b><u>Sample Note:</u></b>	Metals:Al, Cu, Fe, Pb, Zn, V.							
1211237-008E	S PARR SW-11	11/30/12 7:10	Water	01/14/13			W_200.7Master	
1211237-008F	S PARR SW-11	11/30/12 7:10	Water	01/14/13				



## Login Summary Report

**Client ID:** TL5744 Environmental Technical Services  
**Project Name:** LRT SW Annual 11/30/12  
**Project # :**  
**Report Due Date:** 12/14/2012  
**Comments:** Metals:Al, Cu, Fe, Pb, Zn, V.  
Client specified that "Vn" is for Vanadium. 10day TAT. -KB  
**Work Order # :** 1211237

**QC Level:**  
**TAT Requested:** 10 Day:0  
**Date Received:** 11/30/2012  
**Time Received:** 13:38

<u>WO Sample ID</u>	<u>Client Sample ID</u>	<u>Collection Date/Time</u>	<u>Matrix</u>	<u>Scheduled Disposal</u>	<u>Sample On Hold</u>	<u>Test On Hold</u>	<u>Requested Tests</u>	<u>Subbed</u>
1211237-009A	S PARR SW-12	11/30/12 7:40	Water	01/14/13			W_8081A_OCP	
1211237-009B	S PARR SW-12	11/30/12 7:40	Water	01/14/13			W_pH_SM4500-H+ B W_120.1 Cond W_TSS_160.2	
1211237-009C	S PARR SW-12	11/30/12 7:40	Water	01/14/13			W_415.1TOC W_8260MBTEX W_GCMS-GRO	
1211237-009D	S PARR SW-12	11/30/12 7:40	Water	01/14/13			W_TOG1664A W_TPHDO	
1211237-009E	S PARR SW-12	11/30/12 7:40	Water	01/14/13			W_COD	
1211237-009F	S PARR SW-12	11/30/12 7:40	Water	01/14/13			W_200.7Master	
							W_8081A_OCP	





1211237

CHAIN OF CUSTODY/ANALYSES REQUESTED						ANNUAL STORMWATER SAMPLES							
Environmental Technical Services						TL23218		<b>MUST ANALYZE USING 40 CFR 136 METHODS</b>					
1548 Jacob Avenue						Project Name: LRT SW ANNUAL 11/30/12							
San Jose, California 95118													
CLIENT ID	CHK BY SYSTEMS TO BE ANALYZED	DATE	TIME	LAB ID NO	TSS	SPEC COND	TPHG BTEX MTbE 8260	TOG 1664	COD	TTL METALS AL, CU, FE, PB, ZN, VN 8081	TOC	TEPH MO	
001A,B,C,D,E,F	SW-1	X	113012	0700		X	X	X	X	X	X	X	
002A,B,C,D,E,F	SW-2	X	113012	0730		X	X	X	X	X	X	X	
003A,B,C,D,E,F	SW-3	X	113012	0830		X	X	X	X	X	X	X	
004A,B,C,D,E,F	SW-4	X	113012	0800		X	X	X	X	X	X	X	
005A,B,C,D,E,F	SW-5	X	113012	0830		X	X	X	X	X	X	X	
006A,B,C,D,E,F	SW-6	X	113012	0900		X	X	X	X	X	X	X	
007A,B,C,D,E,F	SW-7	X	113012	0850		X	X	X	X	X	X	X	
	S PARR SW-10	NS											
008A,B,C,D,E,F	S PARR SW-11	X	113012	0710		X	X	X	X	X	X	X	
009A,B,C,D,E,F	N PARR SW-12	X	113012	0740		X	X	X	X	X	X	X	
Sampled/Released By:						Released To:							
Print: TONY LESTER (COOLER)						Print: TONY LESTER							
Sign: <u>Tony Lester</u>						Sign: <u>Tony Lester</u>							
Date: 11/30/12 Time: 1100						Date: 11/30/12 Time: 1217							
Released By:						Released To:							
Print: <u>David Mann</u>						Print: <u>David Mann</u>							
Sign: <u>David Mann</u>						Sign: <u>David Mann</u>							
Date: 11/30/12 Time: 12:17 PM						Date: 11/30/12 Time: 1:18 PM							
Released By:						Released To:							
Print: <u>David Mann</u>						Print: <u>NAVIN G.</u>							
Sign: <u>David Mann</u>						Sign: <u>NAVIN G.</u>							
Date: 11/30/12 Time: 1:28 PM						Date: 11-30-12 Time: 13:38							
Notes: Please analyze all Systems checked for all analyses listed. NS=Not Sampled (system wasn't discharging)													

11-30-12

F.C.S.



Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

**Laboratory Job Number 241794  
ANALYTICAL REPORT**

Environmental Tech. Services  
1548 Jacob Avenue  
San Jose, CA 95118

Project : STANDARD  
Location : LRT SW ANNUAL 11/30/12  
Level : II

Sample ID

SW-4

SW-5

SW-6

Lab ID

241794-001

241794-002

241794-003

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAP and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

*Desiree N. Tetrault*

Signature: \_\_\_\_\_

Desiree N. Tetrault  
Project Manager  
(510) 486-0900

Date: 12/20/2012

NELAP # 01107CA

## CASE NARRATIVE

Laboratory number: 241794  
Client: Environmental Tech. Services  
Location: LRT SW ANNUAL 11/30/12  
Request Date: 12/06/12  
Samples Received: 12/06/12

This data package contains sample and QC results for three water samples, requested for the above referenced project on 12/06/12. The samples were received cold and intact.

### TPH-Extractables by GC (EPA 8015B):

No analytical problems were encountered.

### Volatile Organics by GC/MS (EPA 624):

High surrogate recoveries were observed for dibromofluoromethane in a number of samples; no target analytes were detected in these samples. No other analytical problems were encountered.

### Pesticides (EPA 8081A):

All samples underwent sulfur cleanup using the copper option in EPA Method 3660B. SW-4 (lab # 241794-001) and SW-5 (lab # 241794-002) were diluted due to the color of the sample extracts. No other analytical problems were encountered.

### Metals (EPA 200.8):

No analytical problems were encountered.

### Conductivity (SM2510B):

No analytical problems were encountered.

### Total Oil & Grease (HEM) (EPA 1664A):

Matrix spikes were not performed for this analysis due to insufficient sample volume. No analytical problems were encountered.

### Total Suspended Solids (TSS) (EPA 160.2):

High RPD was observed for total suspended solids in the MS/MSD for batch 193667; the parent sample was not a project sample, and the RPD was acceptable in the BS/BSD. No other analytical problems were encountered.

### Chemical Oxygen Demand (SM5220D):

No analytical problems were encountered.

### Total Organic Carbon (TOC) (SM5310C):

No analytical problems were encountered.

241794

CHAIN OF CUSTODY/ANALYSES REQUESTED				ANNUAL STORMWATER SAMPLES										
Environmental Technical Services				TL23223										
1548 Jacob Avenue				Project Name: LRT SW ANNUAL 11/30/12										
San Jose, California 95118				<b>MUST ANALYZE USING 40 CFR 136 METHODS</b>										
CLIENT ID	CHK BY SYSTEMS TO BE	DATE	TIME	LAB ID NO	TSS	SPEC COND	TPHG BTX MTBE	8260	TOG 1664	COD	TTL METALS AL, CU, FE, PB, ZN, VN	8081	TOC	TEPH MO
SW-1														
SW-2														
SW-3														
SW-4	X	5-Dec			X	X	X	X	X	X	X	X	X	X
SW-5	X	5-Dec			X	X	X	X	X	X	X	X	X	X
SW-6	X	5-Dec			X	X	X	X	X	X	X	X	X	X
SW-7														
S PARR SW-10	NS													
S PARR SW-11														
N PARR SW-12														
Sampled/Released By:														
Print: TONY LESTER (COOLER)														
Sign: <u>Tony Lester</u>														
Date: <u>12-5-12</u> Time: <u>1200</u>														
Released By:														
Print: J. NAVARRO (COOLER)														
Sign: <u>J. Navarro</u>														
Date: <u>12-6-12</u> Time: <u>1005</u>														
Released By:														
Print: Ricky Grant														
Sign: <u>Ricky Grant</u>														
Date: <u>12-6-12</u> Time: <u>1005</u>														
Released By:														
Print: Eileen Leung														
Sign: <u>Eileen Leung</u>														
Date: <u>12/6/12</u> Time: <u>1715</u>														
Notes: Please analyze all Systems checked for all analyses listed. NS=Not Sampled (system wasn't discharging)														

mbact on ice cold RC

## COOLER RECEIPT CHECKLIST



Curtis &amp; Tompkins, Ltd.

Login # 241794 Date Received 12/6/12 Number of coolers 2  
 Client Environmental Technical Service Project TL23223 LPT SW Annual 11/30/12  
 Date Opened 12/6/12 By (print) PAH (sign) [Signature]  
 Date Logged in 12/7/12 By (print) EL (sign) [Signature]

1. Did cooler come with a shipping slip (airbill, etc) YES NO  
 Shipping info \_\_\_\_\_

2A. Were custody seals present? .... ☐ YES (circle) on cooler on samples ☒ NO  
 How many \_\_\_\_\_ Name \_\_\_\_\_ Date \_\_\_\_\_

2B. Were custody seals intact upon arrival? \_\_\_\_\_ YES NO N/A

3. Were custody papers dry and intact when received? YES NO

4. Were custody papers filled out properly (ink, signed, etc)? YES NO

5. Is the project identifiable from custody papers? (If so fill out top of form) YES NO

6. Indicate the packing in cooler: (if other, describe) \_\_\_\_\_

☒ Bubble Wrap ☐ Foam blocks ☐ Bags ☐ None  
☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation: \* Notify PM if temperature exceeds 6°C

Type of ice used: ☒ Wet ☐ Blue/Gel ☐ None Temp(°C) 3, 3.5

☐ Samples Received on ice & cold without a temperature blank; temp. taken with IR gun

☐ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? \_\_\_\_\_ YES NO

If YES, what time were they transferred to freezer? \_\_\_\_\_

9. Did all bottles arrive unbroken/unopened? YES NO

10. Are there any missing / extra samples? \_\_\_\_\_ YES NO

11. Are samples in the appropriate containers for indicated tests? \_\_\_\_\_ YES NO

12. Are sample labels present, in good condition and complete? \_\_\_\_\_ YES NO

13. Do the sample labels agree with custody papers? EL YES NO

14. Was sufficient amount of sample sent for tests requested? EL YES NO EL

15. Are the samples appropriately preserved? YES NO N/A

16. Did you check preservatives for all bottles for each sample? YES NO N/A

17. Did you document your preservative check? YES NO N/A

18. Did you change the hold time in LIMS for unpreserved VOAs? \_\_\_\_\_ YES NO N/A

19. Did you change the hold time in LIMS for preserved terracores? \_\_\_\_\_ YES NO N/A

20. Are bubbles > 6mm absent in VOA samples? YES NO N/A

21. Was the client contacted concerning this sample delivery? YES NO

If YES, Who was called? Tony By Tracy Date: 12/7/12

## COMMENTS

15) TOC in HCl preserved VOAs

21) Confirmed samples w/ sample EL same sample IDs are the same despite being on different CUCs.

13) CUC does not indicate sample date EL time. Times on labels are as following:

-001: 1000 -002: 0930 -003: 0900.

14) Only rec'd 2 VOAs preserved in HCl specified for EL

Curtis & Tompkins Sample Preservation for 241794

Sample	pH: <2	>9	>12	Other
-001a	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
j	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
k	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
l	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-002a	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Sample	pH: <2	>9	>12	Other
g	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
j	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
k	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
l	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-003a	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
j	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
k	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
l	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Analyst: SL  
 Date: 12/7/12  
 Page 1 of 1

Total Extractable Hydrocarbons			
Lab #:	241794	Location:	LRT SW ANNUAL 11/30/12
Client:	Environmental Tech. Services	Prep:	EPA 3520C
Project#:	STANDARD	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	12/05/12
Units:	ug/L	Received:	12/06/12
Diln Fac:	1.000	Prepared:	12/07/12
Batch#:	193625		

Field ID: SW-4                      Lab ID: 241794-001  
Type: SAMPLE                      Analyzed: 12/09/12

Analyte	Result	RL
Diesel C10-C24	240 Y	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
o-Terphenyl	102	61-134

Field ID: SW-5                      Lab ID: 241794-002  
Type: SAMPLE                      Analyzed: 12/09/12

Analyte	Result	RL
Diesel C10-C24	270 Y	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
o-Terphenyl	108	61-134

Field ID: SW-6                      Lab ID: 241794-003  
Type: SAMPLE                      Analyzed: 12/09/12

Analyte	Result	RL
Diesel C10-C24	860 Y	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
o-Terphenyl	101	61-134

Type: BLANK                      Analyzed: 12/08/12  
Lab ID: QC669232

Analyte	Result	RL
Diesel C10-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
o-Terphenyl	99	61-134

Y= Sample exhibits chromatographic pattern which does not resemble standard  
ND= Not Detected  
RL= Reporting Limit

## Batch QC Report

Total Extractable Hydrocarbons			
Lab #:	241794	Location:	LRT SW ANNUAL 11/30/12
Client:	Environmental Tech. Services	Prep:	EPA 3520C
Project#:	STANDARD	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC669233	Batch#:	193625
Matrix:	Water	Prepared:	12/07/12
Units:	ug/L	Analyzed:	12/08/12

Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	2,500	1,903	76	60-120

Surrogate	%REC	Limits
o-Terphenyl	91	61-134



## Batch QC Report

Total Extractable Hydrocarbons			
Lab #:	241794	Location:	LRT SW ANNUAL 11/30/12
Client:	Environmental Tech. Services	Prep:	EPA 3520C
Project#:	STANDARD	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Batch#:	193625
MSS Lab ID:	241785-002	Sampled:	12/06/12
Matrix:	Water	Received:	12/06/12
Units:	ug/L	Prepared:	12/07/12
Diln Fac:	1.000	Analyzed:	12/08/12

Type: MS Lab ID: QC669234

Analyte	MSS Result	Spiked	Result	%REC	Limits
Diesel C10-C24	366.9	2,551	2,239	73	44-135

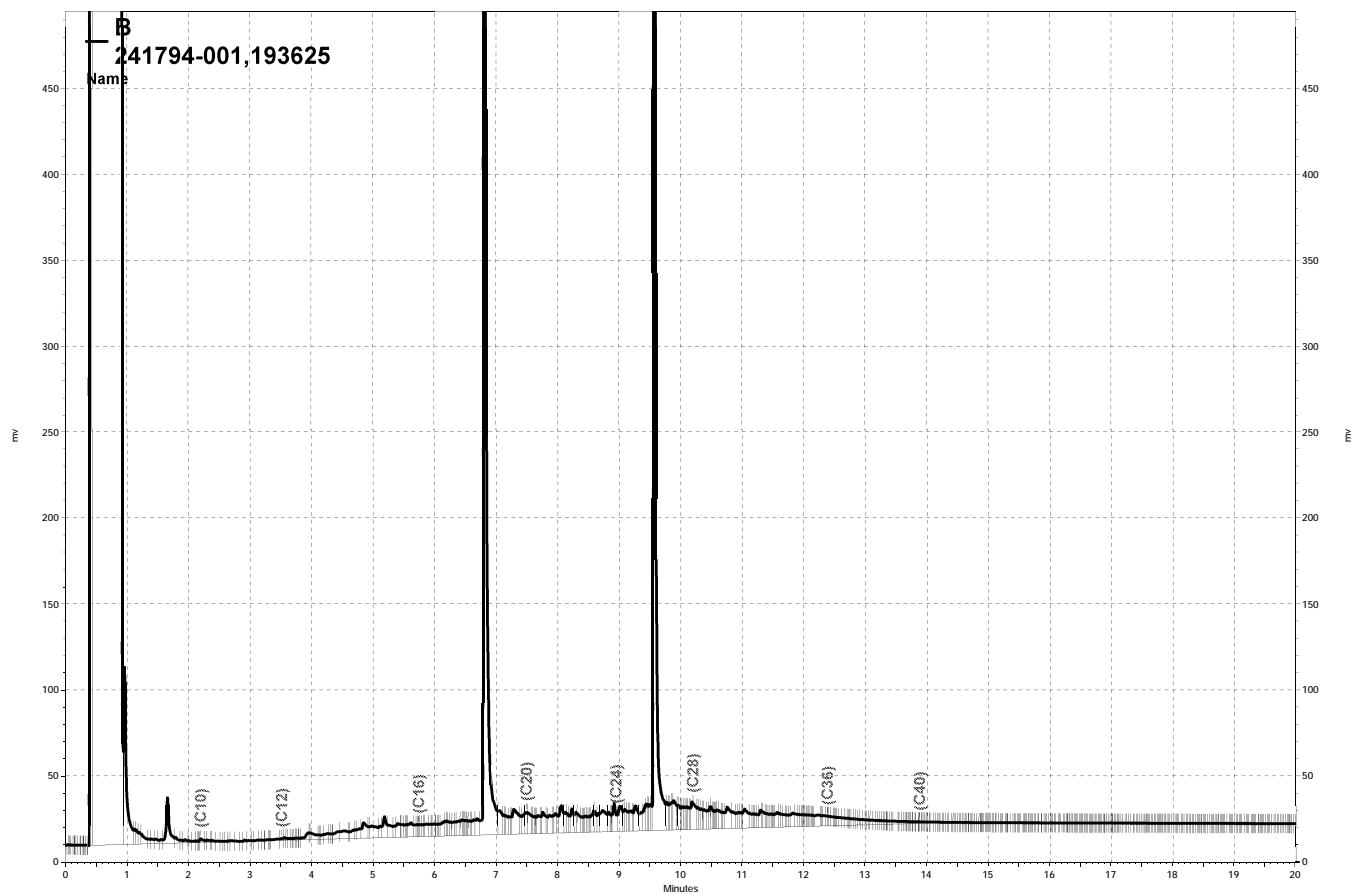
Surrogate	%REC	Limits
o-Terphenyl	89	61-134

Type: MSD Lab ID: QC669235

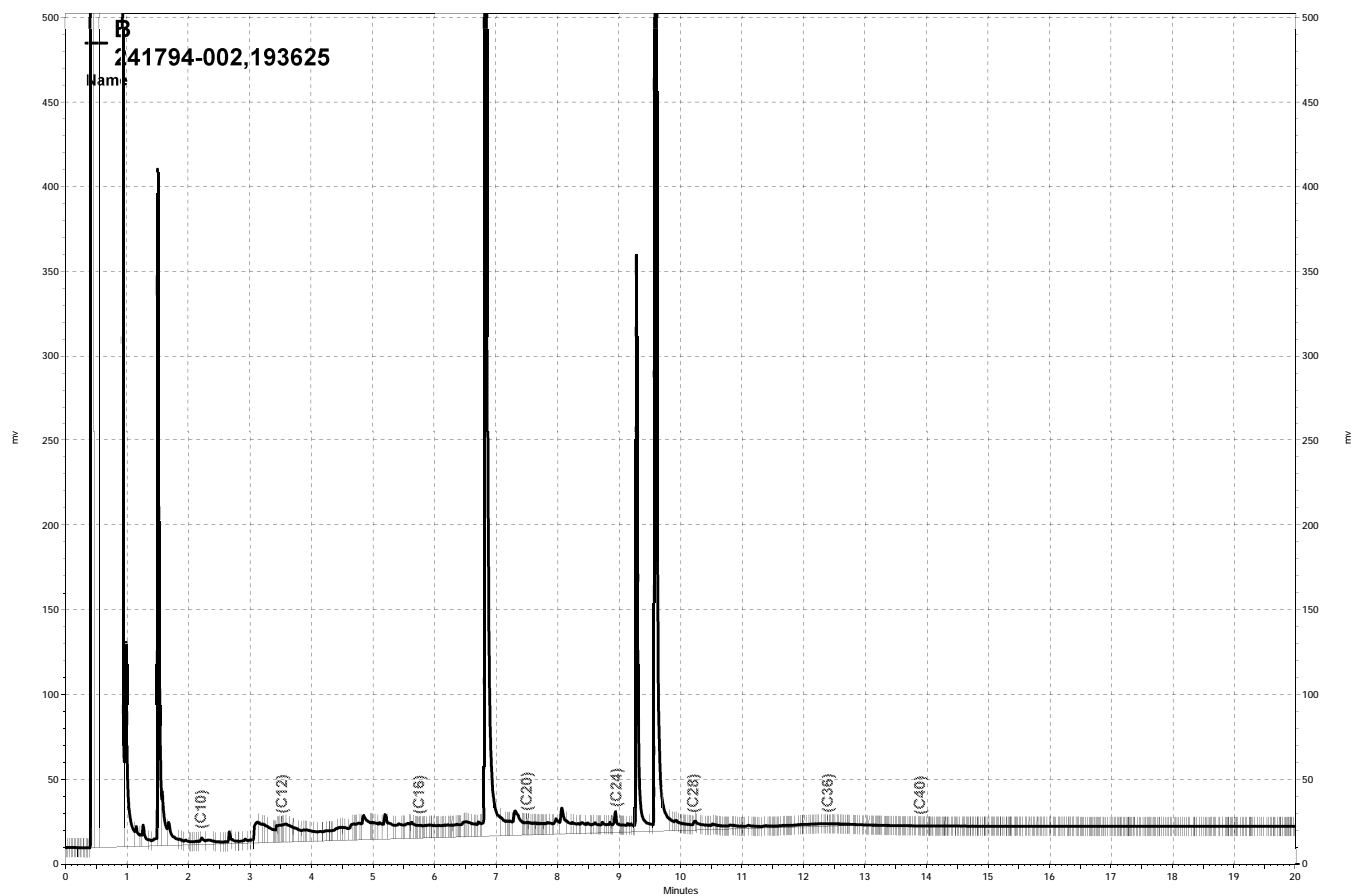
Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	2,551	2,652	90	44-135	17	42

Surrogate	%REC	Limits
o-Terphenyl	110	61-134

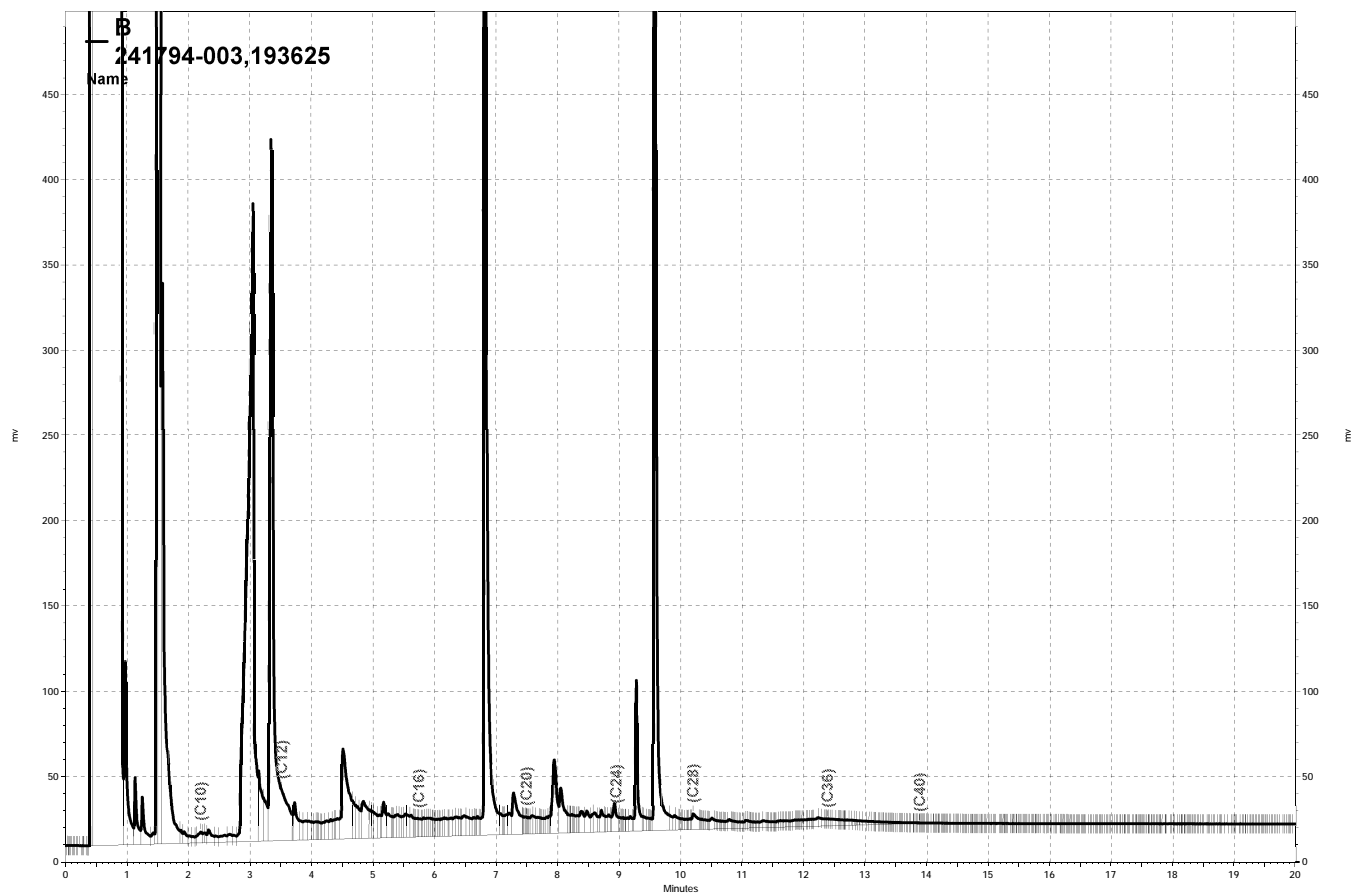
RPD= Relative Percent Difference



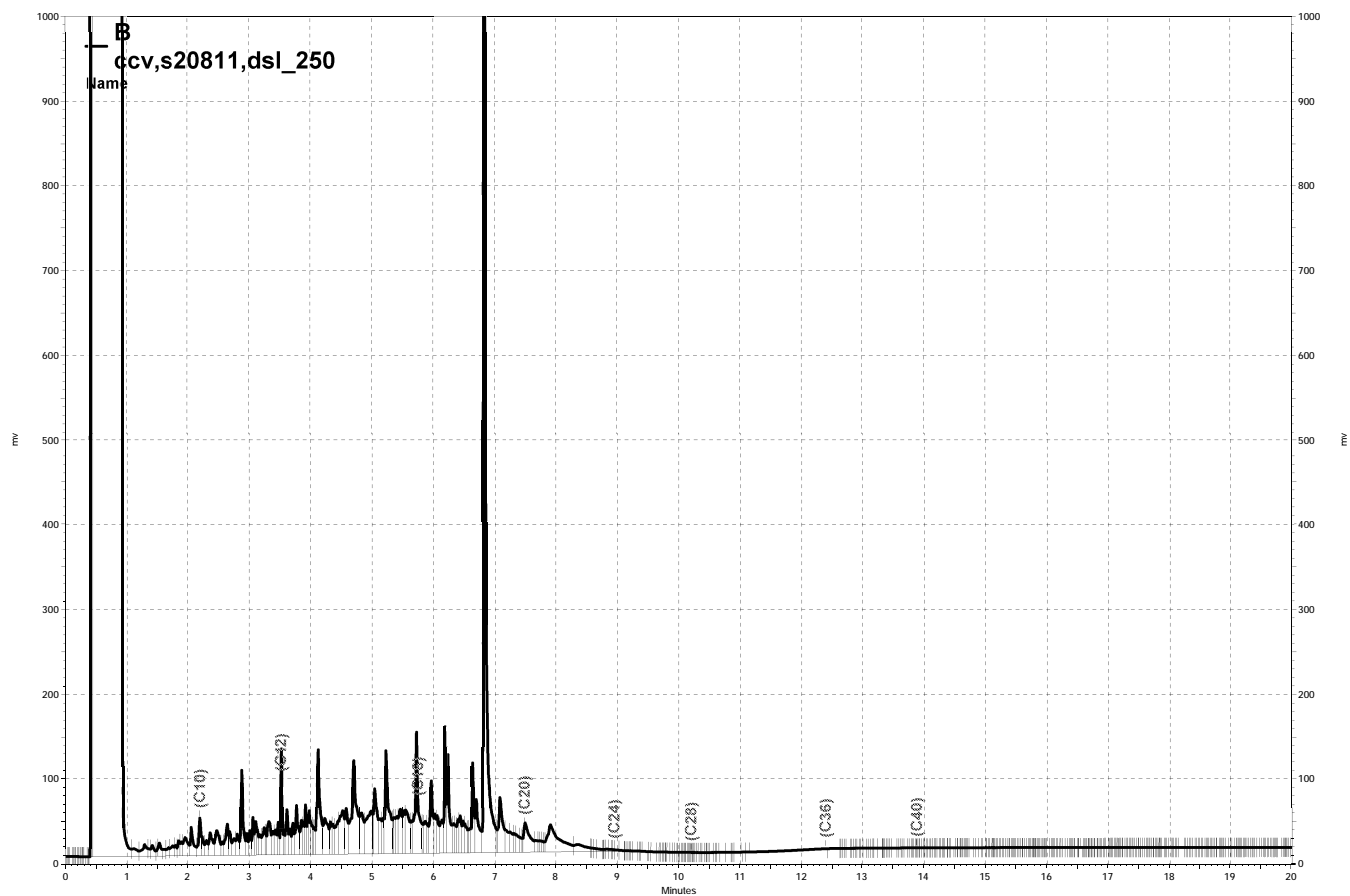
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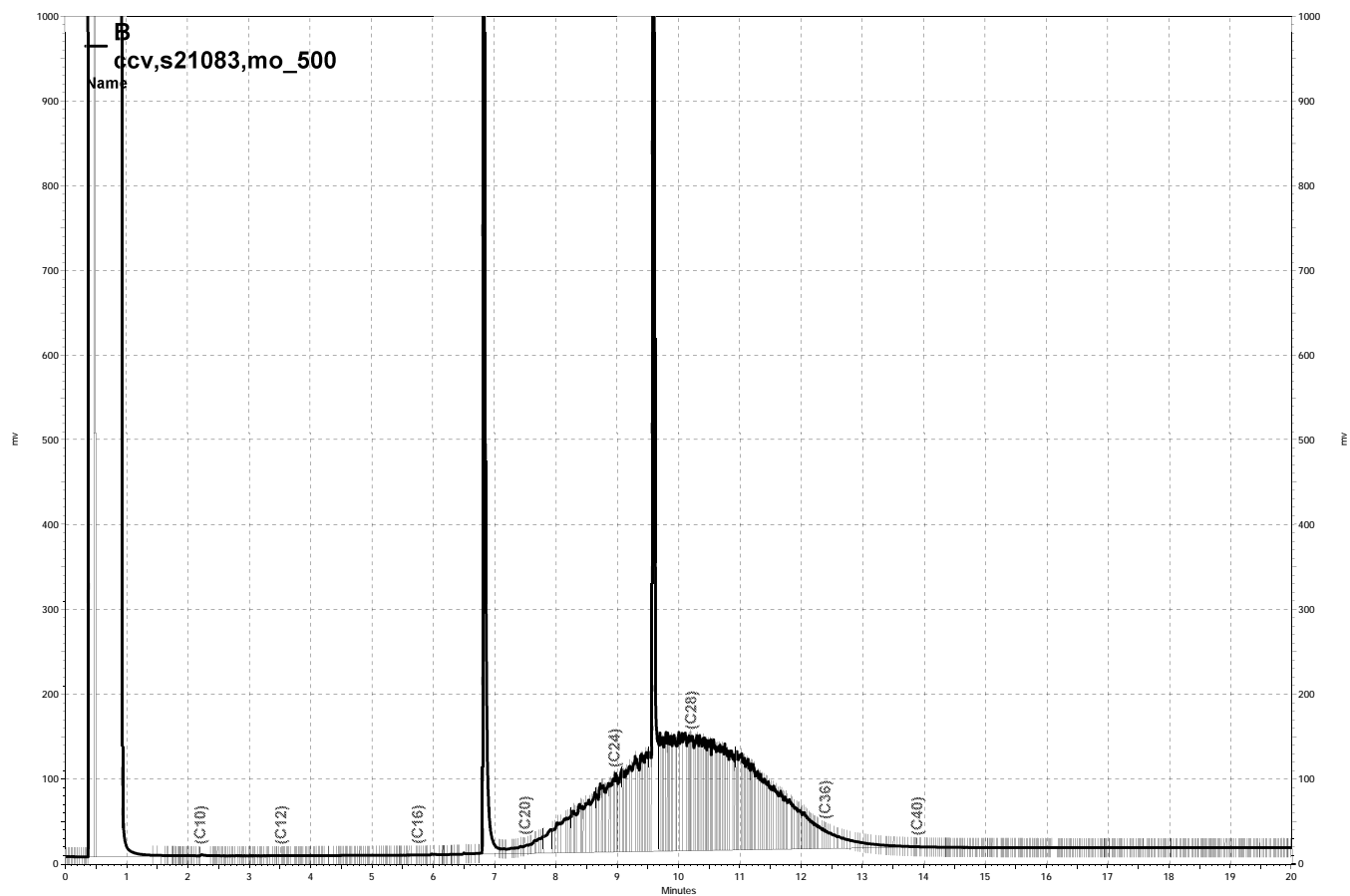
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# Curtis & Tompkins Laboratories Analytical Report

Lab #:	241794	Location:	LRT SW ANNUAL 11/30/12
Client:	Environmental Tech. Services	Prep:	EPA 624
Project#:	STANDARD	Analysis:	EPA 624
Matrix:	Water	Sampled:	12/05/12
Units:	ug/L	Received:	12/06/12
Diln Fac:	1.000		

Field ID: SW-4  
Type: SAMPLE

Lab ID: 241794-001

Analyte	Result	RL	Batch#	Analyzed
Gasoline C7-C12	ND	50	193908	12/16/12
MTBE	ND	0.5	193661	12/10/12
Benzene	ND	0.5	193661	12/10/12
Toluene	ND	0.5	193661	12/10/12
Ethylbenzene	ND	0.5	193661	12/10/12
m,p-Xylenes	ND	0.5	193661	12/10/12
o-Xylene	ND	0.5	193661	12/10/12

Surrogate	%REC	Limits	Batch#	Analyzed
Dibromofluoromethane	148 *	80-127	193661	12/10/12
1,2-Dichloroethane-d4	114	69-148	193661	12/10/12
Toluene-d8	106	80-120	193661	12/10/12
Bromofluorobenzene	114	80-121	193661	12/10/12

Field ID: SW-5  
Type: SAMPLE

Lab ID: 241794-002

Analyte	Result	RL	Batch#	Analyzed
Gasoline C7-C12	ND	50	193908	12/16/12
MTBE	ND	0.5	193661	12/10/12
Benzene	ND	0.5	193661	12/10/12
Toluene	ND	0.5	193661	12/10/12
Ethylbenzene	ND	0.5	193661	12/10/12
m,p-Xylenes	ND	0.5	193661	12/10/12
o-Xylene	ND	0.5	193661	12/10/12

Surrogate	%REC	Limits	Batch#	Analyzed
Dibromofluoromethane	151 *	80-127	193661	12/10/12
1,2-Dichloroethane-d4	115	69-148	193661	12/10/12
Toluene-d8	106	80-120	193661	12/10/12
Bromofluorobenzene	112	80-121	193661	12/10/12

\*= Value outside of OC limits; see narrative

NA= Not Analyzed

ND= Not Detected

RL= Reporting Limit



# Curtis & Tompkins Laboratories Analytical Report

Lab #:	241794	Location:	LRT SW ANNUAL 11/30/12
Client:	Environmental Tech. Services	Prep:	EPA 624
Project#:	STANDARD	Analysis:	EPA 624
Matrix:	Water	Sampled:	12/05/12
Units:	ug/L	Received:	12/06/12
Diln Fac:	1.000		

Field ID:	SW-6	Lab ID:	241794-003
Type:	SAMPLE		

Analyte	Result	RL	Batch#	Analyzed
Gasoline C7-C12	ND	50	193908	12/16/12
MTBE	ND	0.5	193661	12/10/12
Benzene	ND	0.5	193661	12/10/12
Toluene	ND	0.5	193661	12/10/12
Ethylbenzene	ND	0.5	193661	12/10/12
m,p-Xylenes	ND	0.5	193661	12/10/12
o-Xylene	ND	0.5	193661	12/10/12

Surrogate	%REC	Limits	Batch#	Analyzed
Dibromofluoromethane	152 *	80-127	193661	12/10/12
1,2-Dichloroethane-d4	113	69-148	193661	12/10/12
Toluene-d8	107	80-120	193661	12/10/12
Bromofluorobenzene	117	80-121	193661	12/10/12

Type: BLANK Batch#: 193661  
Lab ID: QC669374 Analyzed: 12/10/12

Analyte	Result	RL
Gasoline C7-C12	NA	
MTBE	ND	0.5
Benzene	ND	0.5
Toluene	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	132 *	80-127
1,2-Dichloroethane-d4	113	69-148
Toluene-d8	104	80-120
Bromofluorobenzene	116	80-121

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*= Value outside of QC limits; see narrative
NA= Not Analyzed
ND= Not Detected
RL= Reporting Limit
Page 2 of 3

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### Curtis & Tompkins Laboratories Analytical Report

Lab #:	241794	Location:	LRT SW ANNUAL 11/30/12
Client:	Environmental Tech. Services	Prep:	EPA 624
Project#:	STANDARD	Analysis:	EPA 624
Matrix:	Water	Sampled:	12/05/12
Units:	ug/L	Received:	12/06/12
Diln Fac:	1.000		

Type:	BLANK	Batch#:	193908
Lab ID:	QC670404	Analyzed:	12/16/12

Analyte	Result	RL
Gasoline C7-C12	ND	50
MTBE	NA	
Benzene	NA	
Toluene	NA	
Ethylbenzene	NA	
m,p-Xylenes	NA	
o-Xylene	NA	

Surrogate	%REC	Limits
Dibromofluoromethane	104	80-127
1,2-Dichloroethane-d4	79	69-148
Toluene-d8	102	80-120
Bromofluorobenzene	102	80-121

\*= Value outside of QC limits; see narrative  
 NA= Not Analyzed  
 ND= Not Detected  
 RL= Reporting Limit

## Batch QC Report

Curtis & Tompkins Laboratories Analytical Report			
Lab #:	241794	Location:	LRT SW ANNUAL 11/30/12
Client:	Environmental Tech. Services	Prep:	EPA 624
Project#:	STANDARD	Analysis:	EPA 624
Matrix:	Water	Batch#:	193661
Units:	ug/L	Analyzed:	12/10/12
Diln Fac:	1.000		

Type: BS Lab ID: QC669372

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12		NA		
Benzene	12.50	13.22	106	80-123
Toluene	12.50	13.41	107	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	116	80-127
1,2-Dichloroethane-d4	111	69-148
Toluene-d8	103	80-120
Bromofluorobenzene	112	80-121

Type: BSD Lab ID: QC669373

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12		NA				
Benzene	12.50	13.55	108	80-123	2	20
Toluene	12.50	13.47	108	80-120	0	20

Surrogate	%REC	Limits
Dibromofluoromethane	115	80-127
1,2-Dichloroethane-d4	110	69-148
Toluene-d8	102	80-120
Bromofluorobenzene	110	80-121

NA= Not Analyzed

RPD= Relative Percent Difference

## Batch QC Report

Curtis & Tompkins Laboratories Analytical Report			
Lab #:	241794	Location:	LRT SW ANNUAL 11/30/12
Client:	Environmental Tech. Services	Prep:	EPA 624
Project#:	STANDARD	Analysis:	EPA 624
Matrix:	Water	Batch#:	193908
Units:	ug/L	Analyzed:	12/16/12
Diln Fac:	1.000		

Type: BS Lab ID: QC670407

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	750.0	798.0	106	80-120
Benzene		NA		
Toluene		NA		

Surrogate	%REC	Limits
Dibromofluoromethane	105	80-127
1,2-Dichloroethane-d4	79	69-148
Toluene-d8	102	80-120
Bromofluorobenzene	104	80-121

Type: BSD Lab ID: QC670408

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	750.0	761.7	102	80-120	5	20
Benzene		NA				
Toluene		NA				

Surrogate	%REC	Limits
Dibromofluoromethane	105	80-127
1,2-Dichloroethane-d4	80	69-148
Toluene-d8	101	80-120
Bromofluorobenzene	105	80-121

NA= Not Analyzed

RPD= Relative Percent Difference

### Organochlorine Pesticides

Lab #:	241794	Location:	LRT SW ANNUAL 11/30/12
Client:	Environmental Tech. Services	Prep:	EPA 3520C
Project#:	STANDARD	Analysis:	EPA 8081A
Field ID:	SW-4	Batch#:	193622
Lab ID:	241794-001	Sampled:	12/05/12
Matrix:	Water	Received:	12/06/12
Units:	ug/L	Prepared:	12/07/12
Diln Fac:	10.00	Analyzed:	12/09/12

Analyte	Result	RL
alpha-BHC	ND	0.5
beta-BHC	ND	0.5
gamma-BHC	ND	0.5
delta-BHC	ND	0.5
Heptachlor	ND	0.5
Aldrin	ND	0.5
Heptachlor epoxide	ND	0.5
Endosulfan I	ND	0.5
Dieldrin	ND	1.0
4,4'-DDE	ND	1.0
Endrin	ND	1.0
Endosulfan II	ND	1.0
Endosulfan sulfate	ND	1.0
4,4'-DDD	ND	1.0
Endrin aldehyde	ND	1.0
4,4'-DDT	ND	1.0
alpha-Chlordane	ND	0.5
gamma-Chlordane	ND	0.5
Methoxychlor	ND	5.0
Toxaphene	ND	10

Surrogate	%REC	Limits
TCMX	DO	26-128
Decachlorobiphenyl	DO	29-122

DO= Diluted Out  
ND= Not Detected  
RL= Reporting Limit

### Organochlorine Pesticides

Lab #:	241794	Location:	LRT SW ANNUAL 11/30/12
Client:	Environmental Tech. Services	Prep:	EPA 3520C
Project#:	STANDARD	Analysis:	EPA 8081A
Field ID:	SW-5	Batch#:	193622
Lab ID:	241794-002	Sampled:	12/05/12
Matrix:	Water	Received:	12/06/12
Units:	ug/L	Prepared:	12/07/12
Diln Fac:	5.000	Analyzed:	12/09/12

Analyte	Result	RL
alpha-BHC	ND	0.3
beta-BHC	ND	0.3
gamma-BHC	ND	0.3
delta-BHC	ND	0.3
Heptachlor	ND	0.3
Aldrin	ND	0.3
Heptachlor epoxide	ND	0.3
Endosulfan I	ND	0.3
Dieldrin	ND	0.5
4,4'-DDE	ND	0.5
Endrin	ND	0.5
Endosulfan II	ND	0.5
Endosulfan sulfate	ND	0.5
4,4'-DDD	ND	0.5
Endrin aldehyde	ND	0.5
4,4'-DDT	ND	0.5
alpha-Chlordane	ND	0.3
gamma-Chlordane	ND	0.3
Methoxychlor	ND	2.5
Toxaphene	ND	5.0

Surrogate	%REC	Limits
TCMX	99	26-128
Decachlorobiphenyl	78	29-122

ND= Not Detected  
RL= Reporting Limit

### Organochlorine Pesticides

Lab #:	241794	Location:	LRT SW ANNUAL 11/30/12
Client:	Environmental Tech. Services	Prep:	EPA 3520C
Project#:	STANDARD	Analysis:	EPA 8081A
Field ID:	SW-6	Batch#:	193622
Lab ID:	241794-003	Sampled:	12/05/12
Matrix:	Water	Received:	12/06/12
Units:	ug/L	Prepared:	12/07/12
Diln Fac:	1.000	Analyzed:	12/09/12

Analyte	Result	RL
alpha-BHC	ND	0.05
beta-BHC	ND	0.05
gamma-BHC	ND	0.05
delta-BHC	ND	0.05
Heptachlor	ND	0.05
Aldrin	ND	0.05
Heptachlor epoxide	ND	0.05
Endosulfan I	ND	0.05
Dieldrin	ND	0.1
4,4'-DDE	ND	0.1
Endrin	ND	0.1
Endosulfan II	ND	0.1
Endosulfan sulfate	ND	0.1
4,4'-DDD	ND	0.1
Endrin aldehyde	ND	0.1
4,4'-DDT	ND	0.1
alpha-Chlordane	ND	0.05
gamma-Chlordane	ND	0.05
Methoxychlor	ND	0.5
Toxaphene	ND	1.0

Surrogate	%REC	Limits
TCMX	78	26-128
Decachlorobiphenyl	64	29-122

ND= Not Detected  
RL= Reporting Limit

## Batch QC Report

Organochlorine Pesticides			
Lab #:	241794	Location:	LRT SW ANNUAL 11/30/12
Client:	Environmental Tech. Services	Prep:	EPA 3520C
Project#:	STANDARD	Analysis:	EPA 8081A
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC669219	Batch#:	193622
Matrix:	Water	Prepared:	12/07/12
Units:	ug/L	Analyzed:	12/08/12

Analyte	Result	RL
alpha-BHC	ND	0.05
beta-BHC	ND	0.05
gamma-BHC	ND	0.05
delta-BHC	ND	0.05
Heptachlor	ND	0.05
Aldrin	ND	0.05
Heptachlor epoxide	ND	0.05
Endosulfan I	ND	0.05
Dieldrin	ND	0.1
4,4'-DDE	ND	0.1
Endrin	ND	0.1
Endosulfan II	ND	0.1
Endosulfan sulfate	ND	0.1
4,4'-DDD	ND	0.1
Endrin aldehyde	ND	0.1
4,4'-DDT	ND	0.1
alpha-Chlordane	ND	0.05
gamma-Chlordane	ND	0.05
Methoxychlor	ND	0.5
Toxaphene	ND	1.0

Surrogate	%REC	Limits
TCMX	78	26-128
Decachlorobiphenyl	73	29-122

ND= Not Detected

RL= Reporting Limit

## Batch QC Report

Organochlorine Pesticides			
Lab #:	241794	Location:	LRT SW ANNUAL 11/30/12
Client:	Environmental Tech. Services	Prep:	EPA 3520C
Project#:	STANDARD	Analysis:	EPA 8081A
Matrix:	Water	Batch#:	193622
Units:	ug/L	Prepared:	12/07/12
Diln Fac:	1.000	Analyzed:	12/08/12

Type: BS Lab ID: QC669220

Analyte	Spiked	Result	%REC	Limits
gamma-BHC	0.2000	0.1695	85	51-142
Heptachlor	0.2000	0.1819	91	44-136
Aldrin	0.2000	0.1657	83	49-129
Dieldrin	0.4000	0.3483 #	87	51-149
Endrin	0.4000	0.3384 #	85	44-147
4,4'-DDT	0.4000	0.3828 #	96	44-153

Surrogate	%REC	Limits
TCMX	60	26-128
Decachlorobiphenyl	84	29-122

Type: BSD Lab ID: QC669221

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
gamma-BHC	0.2000	0.1556	78	51-142	9	20
Heptachlor	0.2000	0.1596	80	44-136	13	29
Aldrin	0.2000	0.1495	75	49-129	10	34
Dieldrin	0.4000	0.2957 #	74	51-149	16	37
Endrin	0.4000	0.2885 #	72	44-147	16	39
4,4'-DDT	0.4000	0.2854 #	71	44-153	29	37

Surrogate	%REC	Limits
TCMX	57	26-128
Decachlorobiphenyl	61	29-122

#= CCV drift outside limits; average CCV drift within limits per method requirements  
RPD= Relative Percent Difference



### Metals Analytical Report

Lab #:	241794	Location:	LRT SW ANNUAL 11/30/12
Client:	Environmental Tech. Services	Prep:	EPA 200.8
Project#:	STANDARD	Analysis:	EPA 200.8
Matrix:	Water	Sampled:	12/05/12
Units:	ug/L	Received:	12/06/12
Diln Fac:	5.000	Prepared:	12/07/12
Batch#:	193634		

Field ID: SW-4                      Lab ID: 241794-001  
Type: SAMPLE

Analyte	Result	RL	Analyzed
Aluminum	120	50	12/10/12
Copper	4.1	2.3	12/11/12
Iron	330	50	12/10/12
Lead	3.7	1.0	12/10/12
Vanadium	20	1.0	12/10/12
Zinc	51	20	12/12/12

Field ID: SW-5                      Lab ID: 241794-002  
Type: SAMPLE

Analyte	Result	RL	Analyzed
Aluminum	100	50	12/10/12
Copper	7.1	2.3	12/11/12
Iron	200	50	12/10/12
Lead	3.5	1.0	12/10/12
Vanadium	3.0	1.0	12/10/12
Zinc	72	20	12/12/12

Field ID: SW-6                      Lab ID: 241794-003  
Type: SAMPLE

Analyte	Result	RL	Analyzed
Aluminum	130	50	12/10/12
Copper	19	2.3	12/11/12
Iron	200	50	12/10/12
Lead	7.8	1.0	12/10/12
Vanadium	2.9	1.0	12/10/12
Zinc	160	20	12/12/12

Type: BLANK                      Lab ID: QC669267

Analyte	Result	RL	Analyzed
Aluminum	ND	50	12/10/12
Copper	ND	2.3	12/11/12
Iron	ND	50	12/10/12
Lead	ND	1.0	12/10/12
Vanadium	ND	1.0	12/10/12
Zinc	ND	20	12/12/12

## Batch QC Report

Metals Analytical Report			
Lab #:	241794	Location:	LRT SW ANNUAL 11/30/12
Client:	Environmental Tech. Services	Prep:	EPA 200.8
Project#:	STANDARD	Analysis:	EPA 200.8
Matrix:	Water	Batch#:	193634
Units:	ug/L	Prepared:	12/07/12
Diln Fac:	5.000		

Type: BS Lab ID: QC669268

Analyte	Spiked	Result	%REC	Limits	Analyzed
Aluminum	10,000	9,735	97	58-134	12/10/12
Copper	100.0	94.70	95	74-120	12/11/12
Iron	10,000	9,665	97	55-145	12/10/12
Lead	100.0	102.8	103	72-120	12/10/12
Vanadium	100.0	89.65	90	73-120	12/10/12
Zinc	100.0	94.35	94	70-123	12/12/12

Type: BSD Lab ID: QC669269

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	Analyzed
Aluminum	10,000	9,730	97	58-134	0	23	12/10/12
Copper	100.0	92.15	92	74-120	3	23	12/11/12
Iron	10,000	9,375	94	55-145	3	35	12/10/12
Lead	100.0	101.7	102	72-120	1	20	12/10/12
Vanadium	100.0	86.45	86	73-120	4	20	12/10/12
Zinc	100.0	96.25	96	70-123	2	36	12/12/12

RPD= Relative Percent Difference

## Batch QC Report

Metals Analytical Report			
Lab #:	241794	Location:	LRT SW ANNUAL 11/30/12
Client:	Environmental Tech. Services	Prep:	EPA 200.8
Project#:	STANDARD	Analysis:	EPA 200.8
Field ID:	SW-4 CHAMBER	Batch#:	193634
MSS Lab ID:	241793-001	Sampled:	12/05/12
Matrix:	Water	Received:	12/06/12
Units:	ug/L	Prepared:	12/07/12
Diln Fac:	5.000		

Type: MS Lab ID: QC669270

Analyte	MSS Result	Spiked	Result	%REC	Limits	Analyzed
Aluminum	178.1	10,000	10,590	104	58-130	12/10/12
Copper	4.318	100.0	103.9	100	64-120	12/11/12
Iron	335.2	10,000	10,520	102	50-138	12/10/12
Lead	2.678	100.0	109.8	107	66-120	12/10/12
Vanadium	21.87	100.0	112.9	91	67-120	12/10/12
Zinc	46.40	100.0	161.4	115	58-123	12/12/12

Type: MSD Lab ID: QC669271

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	Analyzed
Aluminum	10,000	10,860	107	58-130	2	20	12/10/12
Copper	100.0	105.6	101	64-120	2	44	12/11/12
Iron	10,000	11,160	108	50-138	6	34	12/10/12
Lead	100.0	113.3	111	66-120	3	20	12/10/12
Vanadium	100.0	124.5	103	67-120	10	41	12/10/12
Zinc	100.0	149.7	103	58-123	8	44	12/12/12

RPD= Relative Percent Difference

Total Oil & Grease (HEM)			
Lab #:	241794	Location:	LRT SW ANNUAL 11/30/12
Client:	Environmental Tech. Services	Prep:	METHOD
Project#:	STANDARD	Analysis:	EPA 1664A
Analyte:	Oil & Grease (HEM)	Sampled:	12/05/12
Matrix:	Water	Received:	12/06/12
Units:	mg/L	Analyzed:	12/11/12
Batch#:	193754		

Field ID	Type	Lab ID	Result	RL	Diln Fac
SW-4	SAMPLE	241794-001	ND	5.00	1.000
SW-5	SAMPLE	241794-002	ND	5.00	1.000
SW-6	SAMPLE	241794-003	ND	4.70	0.9400
	BLANK	QC669782	ND	5.00	1.000

ND= Not Detected  
RL= Reporting Limit

## Batch QC Report

Total Oil & Grease (HEM)			
Lab #:	241794	Location:	LRT SW ANNUAL 11/30/12
Client:	Environmental Tech. Services	Prep:	METHOD
Project#:	STANDARD	Analysis:	EPA 1664A
Analyte:	Oil & Grease (HEM)	Diln Fac:	1.000
Matrix:	Water	Batch#:	193754
Units:	mg/L	Analyzed:	12/11/12

Type	Lab ID	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC669783	40.00	36.70	92	78-114		
BSD	QC669784	40.00	37.70	94	78-114	3	18

RPD= Relative Percent Difference

Chemical Oxygen Demand			
Lab #:	241794	Location:	LRT SW ANNUAL 11/30/12
Client:	Environmental Tech. Services	Prep:	METHOD
Project#:	STANDARD	Analysis:	SM5220D
Analyte:	Chemical Oxygen Demand	Batch#:	193628
Matrix:	Water	Received:	12/06/12
Units:	mg/L	Prepared:	12/07/12 14:30
Diln Fac:	1.000	Analyzed:	12/07/12 16:30

Field ID	Type	Lab ID	Result	RL	Sampled
SW-4	SAMPLE	241794-001	76	10	12/05/12 10:00
SW-5	SAMPLE	241794-002	19	10	12/05/12 09:30
SW-6	SAMPLE	241794-003	23	10	12/05/12 09:00
	BLANK	QC669245	ND	10	

ND= Not Detected  
RL= Reporting Limit

## Batch QC Report

Chemical Oxygen Demand			
Lab #:	241794	Location:	LRT SW ANNUAL 11/30/12
Client:	Environmental Tech. Services	Prep:	METHOD
Project#:	STANDARD	Analysis:	SM5220D
Analyte:	Chemical Oxygen Demand	Batch#:	193628
Field ID:	SW-6	Sampled:	12/05/12 09:00
MSS Lab ID:	241794-003	Received:	12/06/12
Matrix:	Water	Prepared:	12/07/12 14:30
Units:	mg/L	Analyzed:	12/07/12 16:30

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln	Fac
LCS	QC669246		75.00	73.37	98	90-110			1.000	
MS	QC669247	23.24	300.0	302.6	93	58-130			2.000	
MSD	QC669248		300.0	312.8	97	58-130	3	20	2.000	

RPD= Relative Percent Difference

Conductivity			
Lab #:	241794	Location:	LRT SW ANNUAL 11/30/12
Client:	Environmental Tech. Services	Prep:	METHOD
Project#:	STANDARD	Analysis:	SM2510B
Analyte:	Specific Conductance	Batch#:	193682
Matrix:	Water	Received:	12/06/12
Units:	umhos/cm	Analyzed:	12/10/12 18:00
Diln Fac:	1.000		

Field ID	Type	Lab ID	Result	RL	Sampled
SW-4	SAMPLE	241794-001	130	1.0	12/05/12 10:00
SW-5	SAMPLE	241794-002	75	1.0	12/05/12 09:30
SW-6	SAMPLE	241794-003	93	1.0	12/05/12 09:00
	BLANK	QC669465	ND	1.0	

ND= Not Detected  
RL= Reporting Limit



## Batch QC Report

Conductivity			
Lab #:	241794	Location:	LRT SW ANNUAL 11/30/12
Client:	Environmental Tech. Services	Prep:	METHOD
Project#:	STANDARD	Analysis:	SM2510B
Analyte:	Specific Conductance	Diln Fac:	1.000
Field ID:	SW-4	Batch#:	193682
MSS Lab ID:	241794-001	Sampled:	12/05/12 10:00
Matrix:	Water	Received:	12/06/12
Units:	umhos/cm	Analyzed:	12/10/12 18:00

Type	Lab ID	MSS Result	Spiked	Result	RL	%REC	Limits	RPD	Lim
LCS	QC669466		1,000	1,007		101	90-110		
SDUP	QC669467	134.5		134.2	1.000			0	20

RL= Reporting Limit

RPD= Relative Percent Difference

Total Organic Carbon (TOC)			
Lab #:	241794	Location:	LRT SW ANNUAL 11/30/12
Client:	Environmental Tech. Services	Prep:	METHOD
Project#:	STANDARD	Analysis:	SM5310C
Analyte:	Total Organic Carbon	Batch#:	193709
Matrix:	Water	Sampled:	12/05/12
Units:	mg/L	Received:	12/06/12
Diln Fac:	1.000	Analyzed:	12/11/12

Field ID	Type	Lab ID	Result	RL
SW-4	SAMPLE	241794-001	1.8	0.50
SW-5	SAMPLE	241794-002	2.4	0.50
SW-6	SAMPLE	241794-003	4.0	0.50
	BLANK	QC669584	ND	0.50

ND= Not Detected  
RL= Reporting Limit

## Batch QC Report

Total Organic Carbon (TOC)			
Lab #:	241794	Location:	LRT SW ANNUAL 11/30/12
Client:	Environmental Tech. Services	Prep:	METHOD
Project#:	STANDARD	Analysis:	SM5310C
Analyte:	Total Organic Carbon	Diln Fac:	1.000
Field ID:	ZZZZZZZZZZ	Batch#:	193709
MSS Lab ID:	241667-011	Sampled:	12/03/12
Matrix:	Water	Received:	12/03/12
Units:	mg/L		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Analyzed
LCS	QC669585		10.00	9.636	96	90-110			12/11/12
MS	QC669586	2.666	2.000	4.767	105	50-126			12/12/12
MSD	QC669587		2.000	4.945	114	50-126	4	20	12/12/12

RPD= Relative Percent Difference

Total Suspended Solids (TSS)			
Lab #:	241794	Location:	LRT SW ANNUAL 11/30/12
Client:	Environmental Tech. Services	Prep:	METHOD
Project#:	STANDARD	Analysis:	SM2540D
Analyte:	Total Suspended Solids	Sampled:	12/05/12
Matrix:	Water	Received:	12/06/12
Units:	mg/L	Prepared:	12/10/12
Diln Fac:	1.000	Analyzed:	12/11/12
Batch#:	193667		

Field ID	Type	Lab ID	Result	RL
SW-4	SAMPLE	241794-001	77	5
SW-5	SAMPLE	241794-002	22	5
SW-6	SAMPLE	241794-003	ND	5
	BLANK	QC669394	ND	5

ND= Not Detected  
RL= Reporting Limit

## Batch QC Report

Total Suspended Solids (TSS)			
Lab #:	241794	Location:	LRT SW ANNUAL 11/30/12
Client:	Environmental Tech. Services	Prep:	METHOD
Project#:	STANDARD	Analysis:	SM2540D
Analyte:	Total Suspended Solids	Batch#:	193667
Field ID:	ZZZZZZZZZZ	Sampled:	12/04/12
MSS Lab ID:	241687-007	Received:	12/04/12
Matrix:	Water	Prepared:	12/10/12
Units:	mg/L	Analyzed:	12/11/12
Diln Fac:	1.000		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC669395		50.00	51.00	102	80-120		
BSD	QC669396		50.00	49.00	98	80-120	4	5
MS	QC669397	63.00	50.00	106.0	86	63-138		
MSD	QC669398		50.00	97.00	68	63-138	9 *	5

\*= Value outside of QC limits; see narrative

RPD= Relative Percent Difference



Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

**Laboratory Job Number 242019  
ANALYTICAL REPORT**

Environmental Tech. Services  
1548 Jacob Avenue  
San Jose, CA 95118

Project : STANDARD  
Location : LRT SW ANNUAL  
Level : II

Sample ID  
SW-4

Lab ID  
242019-001

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAP and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: \_\_\_\_\_

*Desiree N. Tetrault*

Desiree N. Tetrault  
Project Manager  
(510) 486-0900

Date: 12/27/2012

NELAP # 01107CA

## CASE NARRATIVE

Laboratory number: 242019  
Client: Environmental Tech. Services  
Location: LRT SW ANNUAL  
Request Date: 12/18/12  
Samples Received: 12/18/12

This data package contains sample and QC results for one water sample, requested for the above referenced project on 12/18/12. The sample was received cold and intact.

**TPH-Extractables by GC (EPA 8015B):**

No analytical problems were encountered.

**Volatile Organics by GC/MS (EPA 624):**

No analytical problems were encountered.

**Pesticides (EPA 8081A):**

All samples underwent sulfur cleanup using the copper option in EPA Method 3660B. SW-4 (lab # 242019-001) was diluted due to the color of the sample extract. No other analytical problems were encountered.

**Metals (EPA 6010B):**

No analytical problems were encountered.

**Conductivity (SM2510B):**

No analytical problems were encountered.

**Total Oil & Grease (HEM) (EPA 1664A):**

Matrix spikes were not performed for this analysis due to insufficient sample volume. No analytical problems were encountered.

**Total Suspended Solids (TSS) (EPA 160.2):**

High RPD was observed for total suspended solids in the BS/BSD for batch 194070. High RPD was observed for total suspended solids in the MS/MSD for batch 194070; the parent sample was not a project sample. No other analytical problems were encountered.

**pH (SM4500H+B):**

No analytical problems were encountered.

**Chemical Oxygen Demand (SM5220D):**

No analytical problems were encountered.

**Total Organic Carbon (TOC) (SM5310C):**

No analytical problems were encountered.

242019

LAB COURIER COPY

CHAIN OF CUSTODY/ANALYSES REQUESTED				ANNUAL STORMWATER SAMPLES								
Environmental Technical Services				Project Name: LRT SW ANNUAL								
1548 Jacob Avenue				Project Name: LRT SW ANNUAL								
San Jose, California 95118				Project Name: LRT SW ANNUAL								
CLIENT ID	CHK BY SYSTEMS TO BE ANALYZED	DATE	TIME	LAB ID NO	TSS	SPEC COND	TPHG BTEX MTbE 8260	TOG 1664	COD	TTLT METALS AL, CU, FE, PB, ZN, VN 8081	TOC	TEPH MO
SW-1												
SW-2												
SW-3												
SW-4												
SW-5												
SW-6												
SW-7		15-Dec	1815hrs		X	X	X	X	X	X	X	X
S PARR SW-10												
S PARR SW-11												
N PARR SW-12												
Sampled/Released By: TONY LESTER TO LRT FRIDGE												
Print: TONY LESTER												
Sign: TONY LESTER												
Date: 12/15/12 Time: 1845												
Released By: TONY LESTER / LRT FRIDGE												
Print: TONY LESTER												
Sign: TONY LESTER												
Date: 12/15/12 Time: 0915												
Released By: JOAQUIN MARTINEZ / SCALE HOUSE LAB												
Print: JOAQUIN MARTINEZ												
Sign: JOAQUIN MARTINEZ												
Date: 12/19/12 Time: 0915												
Released By: JOAQUIN MARTINEZ / SCALE HOUSE LAB												
Print: JOAQUIN MARTINEZ												
Sign: JOAQUIN MARTINEZ												
Date: 12/19/12 Time: 0930												
Notes: Please analyze all Systems checked for all analyses listed. NS=Not Sampled (system wasn't discharging)												



**Subject:** RE: LRT SW ANNUAL - C&T Login Summary (242019)  
**From:** "Helen Mawhinney" <hmawhinneyets@aol.com>  
**Date:** 12/19/2012 8:19 AM  
**To:** "'Tracy Babjar'" <tracy.babjar@ctberk.com>

Please add pH even if over holding time.

## Helen Mawhinney

### ENVIRONMENTAL TECHNICAL SERVICES

1548 Jacob Avenue  
 San Jose, CA 95118  
 Phone: (831) 236-9221  
 Fax: (831) 855-0246  
[hmawhinneyets@aol.com](mailto:hmawhinneyets@aol.com)

**From:** Tracy Babjar [mailto:tracy.babjar@ctberk.com]  
**Sent:** Tuesday, December 18, 2012 6:54 PM  
**To:** James.Jimenez@sbcglobal.net; hmawhinneyets@aol.com  
**Subject:** LRT SW ANNUAL - C&T Login Summary (242019)

### C&T Login Summary for 242019

<b>Project:</b> STANDARD <b>Site:</b> LRT SW ANNUAL <b>Lab Login #:</b> 242019 <b>Report Level:</b> II <b>Report Due:</b> 12/27/12 <b>PO#:</b> <b>C&amp;T Proj Mgr:</b> Tracy Babjar	<b>Report To:</b> Environmental Tech. Services 1548 Jacob Avenue San Jose, CA 95118 ATTN: Helen Mawhinney (831) 236-9221	<b>Bill To:</b> Environmental Tech. Services 1548 Jacob Avenue San Jose, CA 95118 ATTN: Helen Mawhinney (831) 236-9221
See JG or Tracy for questions about how to log in smaples.		

Client ID	Lab ID	Sampled	Received	Matrix	Analyses	COC #	Comments
SW-7	001	12/15	12/18				
				Water	1664T		
				Water	624		TVH/MBTXE
				Water	8081		
				Water	AL		
				Water	COD		
				Water	CU		
				Water	EC		
				Water	FE		
				Water	ICP PREP		
				Water	PB		
				Water	TEHM		
				Water	TOC		
				Water	TSS		
				Water	V		
				Water	ZN		

**Subject:** RE: SW-4 OR SW-7

**From:** Tony Lester <tonyl@levinterminal.com>

**Date:** 12/19/2012 3:07 PM

**To:** Helen Mawhinney <hmawhinneyets@aol.com>

**CC:** "Tracy Babjar (tracy.babjar@ctberk.com)" <tracy.babjar@ctberk.com>

Rats! I blew it, sorry Tracy and Helen!

Thanks for the follow up; bottles were all labeled SW4 correctly.

---

**From:** Helen Mawhinney [mailto:hmawhinneyets@aol.com]

**Sent:** Wednesday, December 19, 2012 12:56 PM

**To:** Tony Lester

**Subject:** SW-4 OR SW-7

Hi Tony,

Tracy said her chain of custody states SW-7 but the sample states SW-4. Which is it and I'll have her change it.

See you tomorrow,

Helen

**Helen Mawhinney**

**ENVIRONMENTAL TECHNICAL SERVICES**

1548 Jacob Avenue

San Jose, CA 95118

Phone: (831) 236-9221

Fax: (831) 855-0246

[hmawhinneyets@aol.com](mailto:hmawhinneyets@aol.com)

242019

ALIGN TYPE DIRECTLY ON THIS LINE

FOIG 31

**LEVIN RICHMOND TERMINAL CORP.**402 Wright Avenue  
RICHMOND, CA 94804-3532**PURCHASE ORDER**Show this Purchase Order Number  
on all correspondence, invoices,  
shipping papers and packages.

P-23231

TO

CURTIS & JENNINGS LTD  
TRASH BAY JAK, RICHMOND MAR  
SIO-204-2326

DATE

12/15/12

REQUISITION NO.

900-020-740

SHIP TO

A. MAUNIMNEY, ETS

REQUISITIONED BY	WHEN SHIP	SHIP VIA	F.O.B. POINT	TERMS
>				
QTY. ORDERED	QTY. RECEIVED	STOCK NO. / DESCRIPTION	UNIT PRICE	TOTAL
1		RAIN WATER SAMPLE		
		SW #4		
		Sampled 1815		
		Released -> LRT FIVE 1845		
		Released -> Carrier 12/18/12		

- Please send \_\_\_\_\_ copies of your invoice.
- Order is to be entered in accordance with prices, delivery and specifications shown above.
- Notify us immediately if you are unable to ship as specified.

OK TO MY P. [Signature]

AUTHORIZATION

PRODUCT 31T

# COOLER RECEIPT CHECKLIST



Curtis & Tompkins, Ltd.

Login # 242019 Date Received 12/18/12 Number of coolers 1  
Client ETS Project LRT SW ANNUAL

Date Opened 12/18 By (print) P.C. (sign) P.C.  
Date Logged in 12/18 By (print) EL (sign) E. Long

1. Did cooler come with a shipping slip (airbill, etc) YES NO

Shipping info \_\_\_\_\_

2A. Were custody seals present? .... ☐ YES (circle) on cooler on samples ☒ NO  
How many \_\_\_\_\_ Name \_\_\_\_\_ Date \_\_\_\_\_

2B. Were custody seals intact upon arrival? YES NO N/A

3. Were custody papers dry and intact when received? YES NO

4. Were custody papers filled out properly (ink, signed, etc)? YES NO

5. Is the project identifiable from custody papers? (If so fill out top of form) YES NO

6. Indicate the packing in cooler: (if other, describe) \_\_\_\_\_

☒ Bubble Wrap ☒ Foam blocks ☐ Bags ☐ None  
☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation: \* Notify PM if temperature exceeds 6°C

Type of ice used: ☒ Wet ☐ Blue/Gel ☐ None Temp(°C) 80

☐ Samples Received on ice & cold without a temperature blank; temp. taken with IR gun

☐ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? YES NO

If YES, what time were they transferred to freezer? \_\_\_\_\_

9. Did all bottles arrive unbroken/unopened? YES NO

10. Are there any missing / extra samples? YES NO

11. Are samples in the appropriate containers for indicated tests? YES NO

12. Are sample labels present, in good condition and complete? YES NO

13. Do the sample labels agree with custody papers? YES NO

14. Was sufficient amount of sample sent for tests requested? YES NO

15. Are the samples appropriately preserved? YES NO N/A

16. Did you check preservatives for all bottles for each sample? YES NO N/A

17. Did you document your preservative check? YES NO N/A

18. Did you change the hold time in LIMS for unpreserved VOAs? YES NO N/A

19. Did you change the hold time in LIMS for preserved terracores? YES NO N/A

20. Are bubbles > 6mm absent in VOA samples? YES NO N/A

21. Was the client contacted concerning this sample delivery? YES NO

If YES, Who was called? \_\_\_\_\_ By \_\_\_\_\_ Date: \_\_\_\_\_

## COMMENTS

13) REC'D ALL CONTAINERS w/ SAMPLE ID "SW-4", NOT "SW-7"  
AS INDICATED ON COL. HAS CORRESPONDING SAMPLE TIME  
AND DATE: 12/15/12 @ 1815.

Curtis & Tompkins Sample Preservation for 242019

Sample	pH: <2	>9	>12	Other
-001a	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
j	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
k	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
l	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
m	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Analyst: P.S.  
 Date: 12/12/12  
 Page 1 of 1

Total Extractable Hydrocarbons			
Lab #:	242019	Location:	LRT SW ANNUAL
Client:	Environmental Tech. Services	Prep:	EPA 3520C
Project#:	STANDARD	Analysis:	EPA 8015B
Field ID:	SW-4	Batch#:	193971
Matrix:	Water	Sampled:	12/15/12
Units:	ug/L	Received:	12/18/12
Diln Fac:	1.000		

Type: SAMPLE Prepared: 12/19/12  
Lab ID: 242019-001 Analyzed: 12/20/12

Analyte	Result	RL
Diesel C10-C24	2,400 Y	50
Motor Oil C24-C36	1,100	300

Surrogate	%REC	Limits
o-Terphenyl	105	61-134

Type: BLANK Prepared: 12/18/12  
Lab ID: QC670660 Analyzed: 12/19/12

Analyte	Result	RL
Diesel C10-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
o-Terphenyl	102	61-134

Y= Sample exhibits chromatographic pattern which does not resemble standard  
ND= Not Detected  
RL= Reporting Limit

## Batch QC Report

Total Extractable Hydrocarbons			
Lab #:	242019	Location:	LRT SW ANNUAL
Client:	Environmental Tech. Services	Prep:	EPA 3520C
Project#:	STANDARD	Analysis:	EPA 8015B
Matrix:	Water	Batch#:	193971
Units:	ug/L	Prepared:	12/18/12
Diln Fac:	1.000	Analyzed:	12/19/12

Type: BS Cleanup Method: EPA 3630C  
Lab ID: QC670661

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	2,500	1,980	79	60-120

Surrogate	%REC	Limits
o-Terphenyl	99	61-134

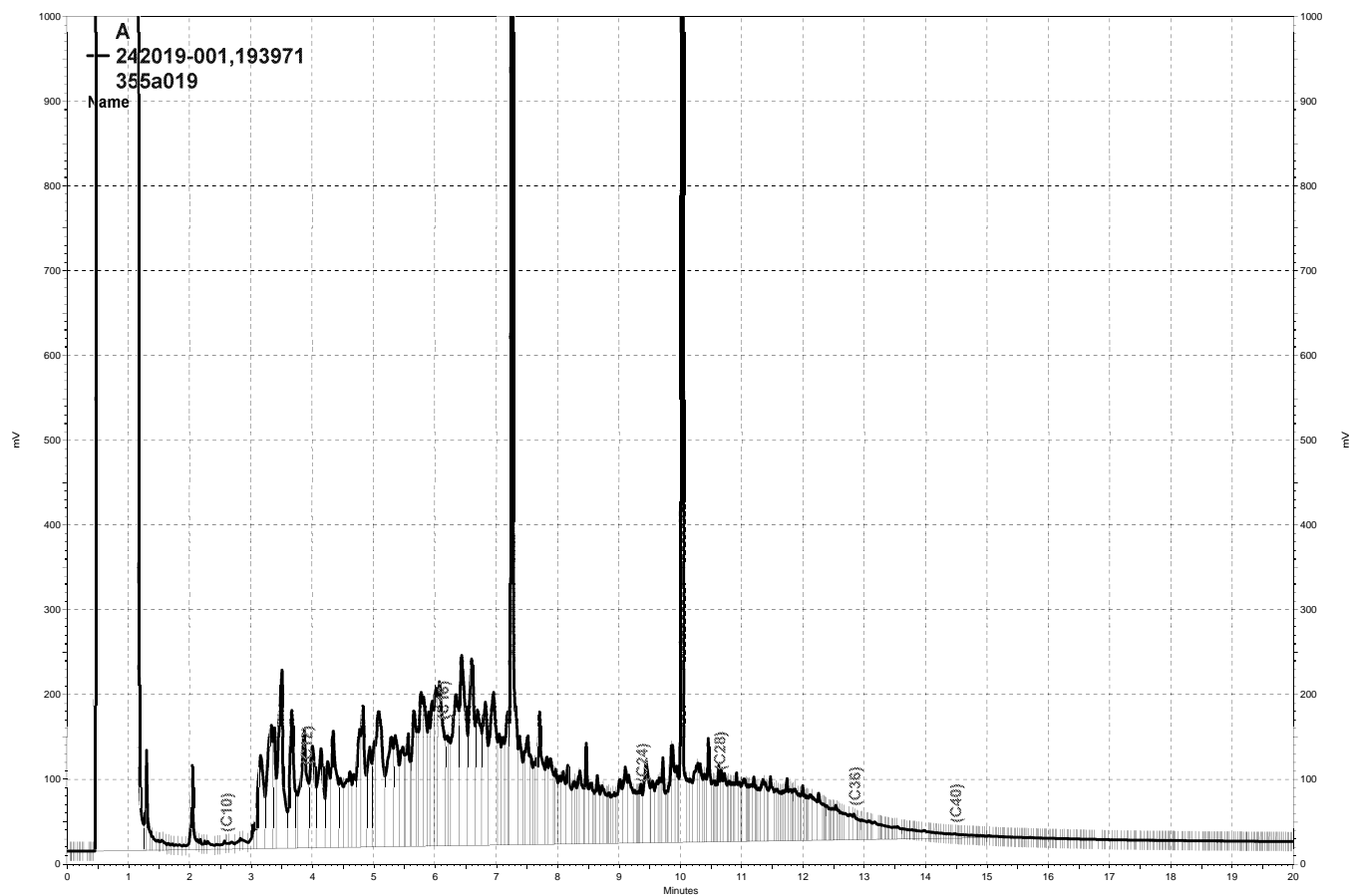
Type: BSD Cleanup Method: EPA 3630C  
Lab ID: QC670662

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	2,500	2,076	83	60-120	5	35

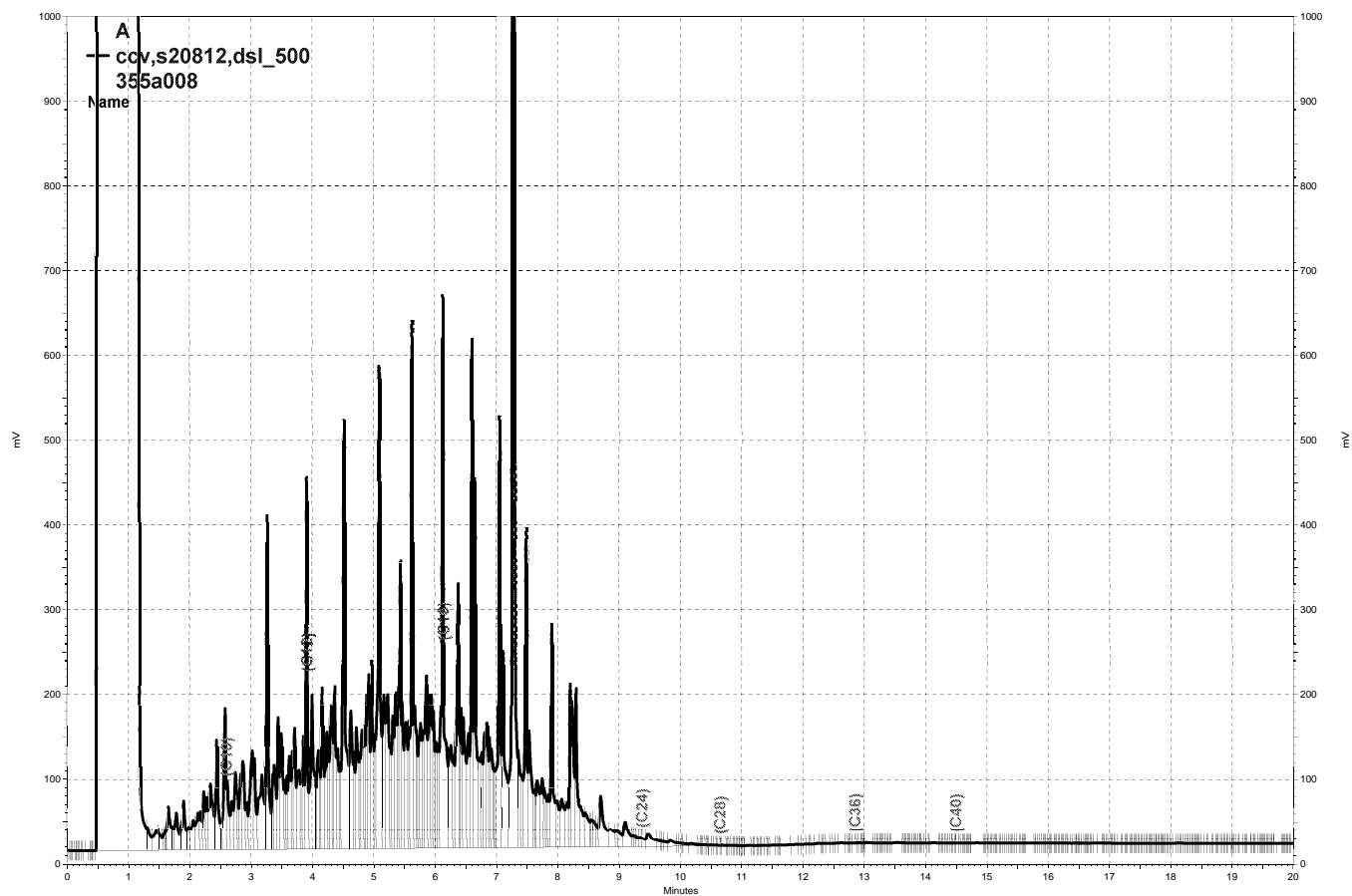
Surrogate	%REC	Limits
o-Terphenyl	113	61-134

RPD= Relative Percent Difference

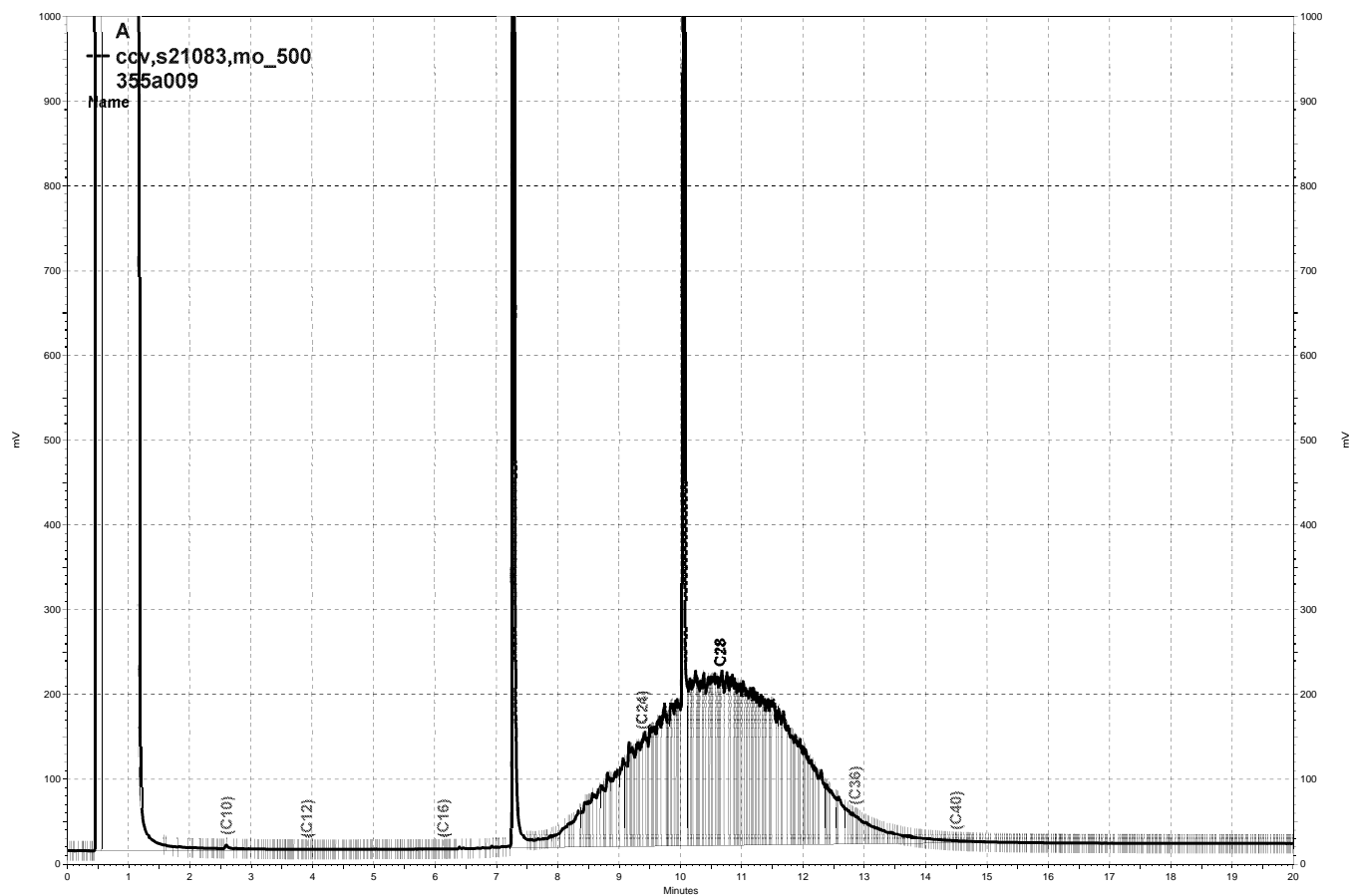


— \\Lims\gdrive\ezchrom\Projects\GC17A\Data\355a019, A





\\Lims\gdrive\ezchrom\Projects\GC17A\Data\355a008, A



— \\Lims\gdrive\ezchrom\Projects\GC17A\Data\355a009, A

### Curtis & Tompkins Laboratories Analytical Report

Lab #:	242019	Location:	LRT SW ANNUAL
Client:	Environmental Tech. Services	Prep:	EPA 624
Project#:	STANDARD	Analysis:	EPA 624
Field ID:	SW-4	Sampled:	12/15/12
Matrix:	Water	Received:	12/18/12
Units:	ug/L	Analyzed:	12/22/12
Diln Fac:	1.000		

Type: SAMPLE Lab ID: 242019-001

Analyte	Result	RL	Batch#
Gasoline C7-C12	ND	50	194105
Benzene	ND	0.5	194104
Toluene	ND	0.5	194104
Ethylbenzene	ND	0.5	194104
m,p-Xylenes	ND	0.5	194104
o-Xylene	ND	0.5	194104

Surrogate	%REC	Limits	Batch#
Dibromofluoromethane	100	80-127	194104
1,2-Dichloroethane-d4	103	69-148	194104
Toluene-d8	101	80-120	194104
Bromofluorobenzene	104	80-121	194104

Type: BLANK Batch#: 194104  
Lab ID: QC671178

Analyte	Result	RL
Gasoline C7-C12	NA	
Benzene	ND	0.5
Toluene	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	98	80-127
1,2-Dichloroethane-d4	100	69-148
Toluene-d8	101	80-120
Bromofluorobenzene	105	80-121

Type: BLANK Batch#: 194105  
Lab ID: QC671181

Analyte	Result	RL
Gasoline C7-C12	ND	50
Benzene	NA	
Toluene	NA	
Ethylbenzene	NA	
m,p-Xylenes	NA	
o-Xylene	NA	

Surrogate	%REC	Limits
Dibromofluoromethane	111	80-127
1,2-Dichloroethane-d4	83	69-148
Toluene-d8	98	80-120
Bromofluorobenzene	101	80-121

NA= Not Analyzed  
ND= Not Detected  
RL= Reporting Limit

## Batch QC Report

Curtis & Tompkins Laboratories Analytical Report			
Lab #:	242019	Location:	LRT SW ANNUAL
Client:	Environmental Tech. Services	Prep:	EPA 624
Project#:	STANDARD	Analysis:	EPA 624
Matrix:	Water	Batch#:	194104
Units:	ug/L	Analyzed:	12/22/12
Diln Fac:	1.000		

Type: BS Lab ID: QC671179

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12		NA		
Benzene	20.00	19.01	95	80-123
Toluene	20.00	20.30	101	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	97	80-127
1,2-Dichloroethane-d4	102	69-148
Toluene-d8	101	80-120
Bromofluorobenzene	100	80-121

Type: BSD Lab ID: QC671180

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12		NA				
Benzene	20.00	18.82	94	80-123	1	20
Toluene	20.00	19.87	99	80-120	2	20

Surrogate	%REC	Limits
Dibromofluoromethane	96	80-127
1,2-Dichloroethane-d4	98	69-148
Toluene-d8	100	80-120
Bromofluorobenzene	99	80-121

NA= Not Analyzed

RPD= Relative Percent Difference

## Batch QC Report

Curtis & Tompkins Laboratories Analytical Report			
Lab #:	242019	Location:	LRT SW ANNUAL
Client:	Environmental Tech. Services	Prep:	EPA 624
Project#:	STANDARD	Analysis:	EPA 624
Matrix:	Water	Batch#:	194105
Units:	ug/L	Analyzed:	12/22/12
Diln Fac:	1.000		

Type: BS Lab ID: QC671184

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	800.0	833.0	104	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	111	80-127
1,2-Dichloroethane-d4	82	69-148
Toluene-d8	99	80-120
Bromofluorobenzene	98	80-121

Type: BSD Lab ID: QC671185

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	800.0	838.9	105	80-120	1	20

Surrogate	%REC	Limits
Dibromofluoromethane	110	80-127
1,2-Dichloroethane-d4	81	69-148
Toluene-d8	100	80-120
Bromofluorobenzene	97	80-121

RPD= Relative Percent Difference

Organochlorine Pesticides			
Lab #:	242019	Location:	LRT SW ANNUAL
Client:	Environmental Tech. Services	Prep:	EPA 3520C
Project#:	STANDARD	Analysis:	EPA 8081A
Field ID:	SW-4	Batch#:	194027
Lab ID:	242019-001	Sampled:	12/15/12
Matrix:	Water	Received:	12/18/12
Units:	ug/L	Prepared:	12/19/12
Diln Fac:	10.00	Analyzed:	12/21/12

Analyte	Result	RL
alpha-BHC	ND	0.5
beta-BHC	ND	0.5
gamma-BHC	ND	0.5
delta-BHC	ND	0.5
Heptachlor	ND	0.5
Aldrin	ND	0.5
Heptachlor epoxide	ND	0.5
Endosulfan I	ND	0.5
Dieldrin	ND	0.9
4,4'-DDE	ND	0.9
Endrin	ND	0.9
Endosulfan II	ND	0.9
Endosulfan sulfate	ND	0.9
4,4'-DDD	ND	0.9
Endrin aldehyde	ND	0.9
4,4'-DDT	ND	0.9
alpha-Chlordane	ND	0.5
gamma-Chlordane	ND	0.5
Methoxychlor	ND	4.7
Toxaphene	ND	9.4

Surrogate	%REC	Limits
TCMX	DO	26-128
Decachlorobiphenyl	DO	29-122

DO= Diluted Out  
ND= Not Detected  
RL= Reporting Limit

## Batch QC Report

Organochlorine Pesticides			
Lab #:	242019	Location:	LRT SW ANNUAL
Client:	Environmental Tech. Services	Prep:	EPA 3520C
Project#:	STANDARD	Analysis:	EPA 8081A
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC670873	Batch#:	194027
Matrix:	Water	Prepared:	12/19/12
Units:	ug/L	Analyzed:	12/21/12

Analyte	Result	RL
alpha-BHC	ND	0.05
beta-BHC	ND	0.05
gamma-BHC	ND	0.05
delta-BHC	ND	0.05
Heptachlor	ND	0.05
Aldrin	ND	0.05
Heptachlor epoxide	ND	0.05
Endosulfan I	ND	0.05
Dieldrin	ND	0.1
4,4'-DDE	ND	0.1
Endrin	ND	0.1
Endosulfan II	ND	0.1
Endosulfan sulfate	ND	0.1
4,4'-DDD	ND	0.1
Endrin aldehyde	ND	0.1
4,4'-DDT	ND	0.1
alpha-Chlordane	ND	0.05
gamma-Chlordane	ND	0.05
Methoxychlor	ND	0.5
Toxaphene	ND	1.0

Surrogate	%REC	Limits
TCMX	79	26-128
Decachlorobiphenyl	68	29-122

ND= Not Detected

RL= Reporting Limit

## Batch QC Report

Organochlorine Pesticides			
Lab #:	242019	Location:	LRT SW ANNUAL
Client:	Environmental Tech. Services	Prep:	EPA 3520C
Project#:	STANDARD	Analysis:	EPA 8081A
Matrix:	Water	Batch#:	194027
Units:	ug/L	Prepared:	12/19/12
Diln Fac:	1.000	Analyzed:	12/21/12

Type: BS Lab ID: QC670874

Analyte	Spiked	Result	%REC	Limits
gamma-BHC	0.2000	0.2393	120	51-142
Heptachlor	0.2000	0.2189	109	44-136
Aldrin	0.2000	0.2351	118	49-129
Dieldrin	0.4000	0.4996	125	51-149
Endrin	0.4000	0.4648	116	44-147
4,4'-DDT	0.4000	0.4785	120	44-153

Surrogate	%REC	Limits
TCMX	82	26-128
Decachlorobiphenyl	79	29-122

Type: BSD Lab ID: QC670875

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
gamma-BHC	0.2000	0.2187	109	51-142	9	20
Heptachlor	0.2000	0.2047	102	44-136	7	29
Aldrin	0.2000	0.2160	108	49-129	8	34
Dieldrin	0.4000	0.4067	102	51-149	20	37
Endrin	0.4000	0.3713	93	44-147	22	39
4,4'-DDT	0.4000	0.3449	86	44-153	32	37

Surrogate	%REC	Limits
TCMX	79	26-128
Decachlorobiphenyl	80	29-122

RPD= Relative Percent Difference



# Batch QC Report

Organochlorine Pesticides			
Lab #:	242019	Location:	LRT SW ANNUAL
Client:	Environmental Tech. Services	Prep:	EPA 3520C
Project#:	STANDARD	Analysis:	EPA 8081A
Field ID:	ZZZZZZZZZZ	Batch#:	194027
MSS Lab ID:	242062-007	Sampled:	12/18/12
Matrix:	Water	Received:	12/19/12
Units:	ug/L	Prepared:	12/20/12
Diln Fac:	1.000	Analyzed:	12/23/12

Type: MS Lab ID: QC670973

Analyte	MSS Result	Spiked	Result	%REC	Limits
gamma-BHC	<0.006226	0.1869	0.1938	104	41-151
Heptachlor	<0.008154	0.1869	0.2042	109	32-165
Aldrin	<0.005567	0.1869	0.1963	105	31-151
Dieldrin	<0.01175	0.3738	0.4060	109	29-165
Endrin	<0.01473	0.3738	0.3876	104	29-180
4,4'-DDT	<0.01894	0.3738	0.4197	112	28-180

Surrogate	%REC	Limits
TCMX	97	26-128
Decachlorobiphenyl	89	29-122

Type: MSD Lab ID: QC670974

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
gamma-BHC	0.1869	0.1836	98	41-151	5	51
Heptachlor	0.1869	0.1782	95	32-165	14	40
Aldrin	0.1869	0.1829	98	31-151	7	51
Dieldrin	0.3738	0.3730	100	29-165	8	49
Endrin	0.3738	0.3355	90	29-180	14	71
4,4'-DDT	0.3738	0.3166	85	28-180	28	59

Surrogate	%REC	Limits
TCMX	92	26-128
Decachlorobiphenyl	66	29-122

RPD= Relative Percent Difference

### Metals Analytical Report

Lab #:	242019	Location:	LRT SW ANNUAL
Client:	Environmental Tech. Services	Prep:	EPA 3010A
Project#:	STANDARD	Analysis:	EPA 6010B
Field ID:	SW-4	Sampled:	12/15/12
Matrix:	Water	Received:	12/18/12
Units:	ug/L	Prepared:	12/20/12
Diln Fac:	1.000	Analyzed:	12/27/12
Batch#:	194067		

Type: SAMPLE Lab ID: 242019-001

Analyte	Result	RL
Aluminum	170	100
Copper	7.3	5.0
Iron	510	100
Lead	7.2	5.0
Vanadium	630	5.0
Zinc	71	20

Type: BLANK Lab ID: QC671031

Analyte	Result	RL
Aluminum	ND	100
Copper	ND	5.0
Iron	ND	100
Lead	ND	5.0
Vanadium	ND	5.0
Zinc	ND	20

ND= Not Detected  
RL= Reporting Limit

## Batch QC Report

Metals Analytical Report			
Lab #:	242019	Location:	LRT SW ANNUAL
Client:	Environmental Tech. Services	Prep:	EPA 3010A
Project#:	STANDARD	Analysis:	EPA 6010B
Matrix:	Water	Batch#:	194067
Units:	ug/L	Prepared:	12/20/12
Diln Fac:	1.000	Analyzed:	12/27/12

Type: BS Lab ID: QC671032

Analyte	Spiked	Result	%REC	Limits
Aluminum	2,000	1,924	96	70-120
Copper	250.0	240.4	96	77-120
Iron	1,000	1,004	100	79-120
Lead	100.0	95.45	95	78-120
Vanadium	500.0	494.1	99	80-120
Zinc	500.0	495.5	99	80-120

Type: BSD Lab ID: QC671033

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aluminum	2,000	1,972	99	70-120	2	20
Copper	250.0	241.3	97	77-120	0	20
Iron	1,000	1,031	103	79-120	3	24
Lead	100.0	95.09	95	78-120	0	20
Vanadium	500.0	497.5	99	80-120	1	20
Zinc	500.0	501.4	100	80-120	1	20

RPD= Relative Percent Difference

## Batch QC Report

Metals Analytical Report			
Lab #:	242019	Location:	LRT SW ANNUAL
Client:	Environmental Tech. Services	Prep:	EPA 3010A
Project#:	STANDARD	Analysis:	EPA 6010B
Field ID:	ZZZZZZZZZZ	Batch#:	194067
MSS Lab ID:	242049-001	Sampled:	12/19/12
Matrix:	Water	Received:	12/19/12
Units:	ug/L	Prepared:	12/20/12
Diln Fac:	1.000	Analyzed:	12/27/12

Type: MS Lab ID: QC671034

Analyte	MSS Result	Spiked	Result	%REC	Limits
Aluminum	27.01	2,000	1,976	97	60-121
Copper	99.65	250.0	346.6	99	71-120
Iron	21.92	1,000	1,034	101	67-126
Lead	4.834	100.0	98.48	94	65-120
Vanadium	<0.4570	500.0	500.7	100	78-120
Zinc	186.5	500.0	684.5	100	75-124

Type: MSD Lab ID: QC671035

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aluminum	2,000	1,973	97	60-121	0	21
Copper	250.0	338.1	95	71-120	2	27
Iron	1,000	1,054	103	67-126	2	23
Lead	100.0	96.74	92	65-120	2	29
Vanadium	500.0	495.6	99	78-120	1	20
Zinc	500.0	673.2	97	75-124	2	27

RPD= Relative Percent Difference

Total Oil & Grease (HEM)			
Lab #:	242019	Location:	LRT SW ANNUAL
Client:	Environmental Tech. Services	Prep:	METHOD
Project#:	STANDARD	Analysis:	EPA 1664A
Analyte:	Oil & Grease (HEM)	Batch#:	194052
Field ID:	SW-4	Sampled:	12/15/12
Matrix:	Water	Received:	12/18/12
Units:	mg/L	Analyzed:	12/20/12

Type	Lab ID	Result	RL	Diln Fac
SAMPLE	242019-001	ND	4.52	0.9500
BLANK	QC670966	ND	5.00	1.000

ND= Not Detected  
RL= Reporting Limit

## Batch QC Report

Total Oil & Grease (HEM)			
Lab #:	242019	Location:	LRT SW ANNUAL
Client:	Environmental Tech. Services	Prep:	METHOD
Project#:	STANDARD	Analysis:	EPA 1664A
Analyte:	Oil & Grease (HEM)	Diln Fac:	1.000
Matrix:	Water	Batch#:	194052
Units:	mg/L	Analyzed:	12/20/12

Type	Lab ID	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC670967	40.00	37.70	94	78-114		
BSD	QC670968	40.00	35.80	90	78-114	5	18

RPD= Relative Percent Difference

Chemical Oxygen Demand			
Lab #:	242019	Location:	LRT SW ANNUAL
Client:	Environmental Tech. Services	Prep:	METHOD
Project#:	STANDARD	Analysis:	SM5220D
Analyte:	Chemical Oxygen Demand	Batch#:	194130
Field ID:	SW-4	Sampled:	12/15/12 18:15
Matrix:	Water	Received:	12/18/12
Units:	mg/L	Prepared:	12/26/12 11:30
Diln Fac:	1.000	Analyzed:	12/26/12 13:50

Type	Lab ID	Result	RL
SAMPLE	242019-001	70	10
BLANK	QC671265	ND	10

ND= Not Detected  
RL= Reporting Limit

## Batch QC Report

Chemical Oxygen Demand			
Lab #:	242019	Location:	LRT SW ANNUAL
Client:	Environmental Tech. Services	Prep:	METHOD
Project#:	STANDARD	Analysis:	SM5220D
Analyte:	Chemical Oxygen Demand	Batch#:	194130
Field ID:	ZZZZZZZZZZ	Sampled:	12/18/12 09:25
MSS Lab ID:	242027-001	Received:	12/18/12
Matrix:	Water	Prepared:	12/26/12 11:30
Units:	mg/L	Analyzed:	12/26/12 13:50

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln	Fac
LCS	QC671266		75.00	73.97	99	90-110			1.000	
MS	QC671267	26.32	300.0	326.9	100	58-130			2.000	
MSD	QC671268		300.0	311.4	95	58-130	5	20	2.000	

RPD= Relative Percent Difference



Conductivity			
Lab #:	242019	Location:	LRT SW ANNUAL
Client:	Environmental Tech. Services	Prep:	METHOD
Project#:	STANDARD	Analysis:	SM2510B
Analyte:	Specific Conductance	Batch#:	194085
Field ID:	SW-4	Sampled:	12/15/12 18:15
Matrix:	Water	Received:	12/18/12
Units:	umhos/cm	Analyzed:	12/21/12 12:35
Diln Fac:	1.000		

Type	Lab ID	Result	RL
SAMPLE	242019-001	1,430	1.0
BLANK	QC671096	ND	1.0

ND= Not Detected  
RL= Reporting Limit

## Batch QC Report

Conductivity			
Lab #:	242019	Location:	LRT SW ANNUAL
Client:	Environmental Tech. Services	Prep:	METHOD
Project#:	STANDARD	Analysis:	SM2510B
Analyte:	Specific Conductance	Diln Fac:	1.000
Field ID:	ZZZZZZZZZZ	Batch#:	194085
MSS Lab ID:	242039-001	Sampled:	12/19/12 10:44
Matrix:	Water	Received:	12/19/12
Units:	umhos/cm	Analyzed:	12/21/12 12:35

Type	Lab ID	MSS Result	Spiked	Result	RL	%REC	Limits	RPD	Lim
LCS	QC671097		1,000	992.0		99	90-110		
SDUP	QC671098	244.8		246.6	1.000			1	20

pH			
Lab #:	242019	Location:	LRT SW ANNUAL
Client:	Environmental Tech. Services	Prep:	METHOD
Project#:	STANDARD	Analysis:	SM4500H+B
Analyte:	pH	Diln Fac:	1.000
Field ID:	SW-4	Batch#:	194029
Lab ID:	242019-001	Sampled:	12/15/12 18:15
Matrix:	Water	Received:	12/18/12
Units:	SU	Analyzed:	12/19/12 11:00

Result	RL
7.3 b	1.0

## Batch QC Report

pH				
Lab #:	242019	Location:	LRT SW ANNUAL	
Client:	Environmental Tech. Services	Prep:	METHOD	
Project#:	STANDARD	Analysis:	SM4500H+B	
Analyte:	pH	Units:	SU	
Field ID:	SW-4	Diln Fac:	1.000	
Type:	SDUP	Batch#:	194029	
MSS Lab ID:	242019-001	Sampled:	12/15/12 18:15	
Lab ID:	QC670881	Received:	12/18/12	
Matrix:	Water	Analyzed:	12/19/12 11:00	

MSS Result	Result	RL	RPD	Lim
7.260	7.240 b	1.000	0	20

b= See narrative

RL= Reporting Limit

RPD= Relative Percent Difference

Total Organic Carbon (TOC)			
Lab #:	242019	Location:	LRT SW ANNUAL
Client:	Environmental Tech. Services	Prep:	METHOD
Project#:	STANDARD	Analysis:	SM5310C
Analyte:	Total Organic Carbon	Batch#:	194078
Field ID:	SW-4	Sampled:	12/15/12
Matrix:	Water	Received:	12/18/12
Units:	mg/L	Analyzed:	12/24/12
Diln Fac:	1.000		

Type	Lab ID	Result	RL
SAMPLE	242019-001	6.4	0.50
BLANK	QC671073	ND	0.50

ND= Not Detected  
RL= Reporting Limit

## Batch QC Report

Total Organic Carbon (TOC)			
Lab #:	242019	Location:	LRT SW ANNUAL
Client:	Environmental Tech. Services	Prep:	METHOD
Project#:	STANDARD	Analysis:	SM5310C
Analyte:	Total Organic Carbon	Diln Fac:	1.000
Field ID:	SW-4	Batch#:	194078
MSS Lab ID:	242019-001	Sampled:	12/15/12
Matrix:	Water	Received:	12/18/12
Units:	mg/L		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Analyzed
LCS	QC671074		10.00	10.47	105	90-110			12/24/12
MS	QC671075	6.425	2.000	8.299	94	50-126			12/26/12
MSD	QC671076		2.000	8.339	96	50-126	0	20	12/26/12

RPD= Relative Percent Difference

Total Suspended Solids (TSS)			
Lab #:	242019	Location:	LRT SW ANNUAL
Client:	Environmental Tech. Services	Prep:	METHOD
Project#:	STANDARD	Analysis:	EPA 160.2
Analyte:	Total Suspended Solids	Batch#:	194070
Field ID:	SW-4	Sampled:	12/15/12
Matrix:	Water	Received:	12/18/12
Units:	mg/L	Analyzed:	12/21/12
Diln Fac:	1.000		

Type	Lab ID	Result	RL
SAMPLE	242019-001	34	5
BLANK	QC671044	ND	5

ND= Not Detected  
RL= Reporting Limit

## Batch QC Report

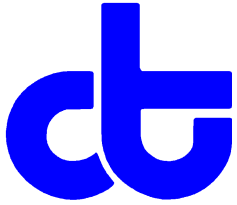
Total Suspended Solids (TSS)			
Lab #:	242019	Location:	LRT SW ANNUAL
Client:	Environmental Tech. Services	Prep:	METHOD
Project#:	STANDARD	Analysis:	EPA 160.2
Analyte:	Total Suspended Solids	Diln Fac:	1.000
Field ID:	ZZZZZZZZZZ	Batch#:	194070
MSS Lab ID:	242004-001	Sampled:	12/18/12
Matrix:	Water	Received:	12/18/12
Units:	mg/L	Analyzed:	12/21/12

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC671045		50.00	47.00	94	80-120		
BSD	QC671046		50.00	51.00	102	80-120	8 *	5
MS	QC671047	<5.000	50.00	48.00	96	63-138		
MSD	QC671048		50.00	45.00	90	63-138	6 *	5

\*= Value outside of QC limits; see narrative

RPD= Relative Percent Difference





Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

**Laboratory Job Number 242107  
ANALYTICAL REPORT**

Environmental Tech. Services  
1548 Jacob Avenue  
San Jose, CA 95118

Project : STANDARD  
Location : Levin Richmond Terminal  
Level : II

<u>Sample ID</u>	<u>Lab ID</u>
SW-1	242107-001
SW-2	242107-002
SW-3	242107-003
SW-4	242107-004
SW-5	242107-005
SW-6	242107-006
SW-7	242107-007
S PARR SW-11	242107-008
N PARR SW-12	242107-009
EXTRA	242107-010

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature:   
Desiree N. Tetrault  
Project Manager  
(510) 486-0900

Date: 01/03/2013

NELAP # 01107CA

## CASE NARRATIVE

Laboratory number: 242107  
Client: Environmental Tech. Services  
Location: Levin Richmond Terminal  
Request Date: 12/21/12  
Samples Received: 12/21/12

This data package contains sample and QC results for nine water samples, requested for the above referenced project on 12/21/12. The samples were received cold and intact.

**TPH-Extractables by GC (EPA 8015B):**

No analytical problems were encountered.

**Volatile Organics by GC/MS (EPA 624):**

No analytical problems were encountered.

**Pesticides (EPA 8081A):**

All samples underwent sulfur cleanup using the copper option in EPA Method 3660B. A number of samples were diluted due to the color of the sample extracts. No other analytical problems were encountered.

**Metals (EPA 200.8):**

No analytical problems were encountered.

**Conductivity (SM2510B):**

No analytical problems were encountered.

**Total Oil & Grease (HEM) (EPA 1664A):**

Matrix spikes were not performed for this analysis due to insufficient sample volume. No analytical problems were encountered.

**Total Suspended Solids (TSS) (EPA 160.2):**

High RPD was observed for total suspended solids in the BS/BSD for batch 194153. No other analytical problems were encountered.

**pH (SM4500H+B):**

No analytical problems were encountered.

**Chemical Oxygen Demand (SM5220D):**

No analytical problems were encountered.

**Total Organic Carbon (TOC) (SM5310C):**

High recovery was observed for total organic carbon in the MSD of SW-1 (lab # 242107-001); the LCS was within limits, and the associated RPD was within limits. No other analytical problems were encountered.

CHAIN OF CUSTODY/ANALYSES REQUESTED				STORMWATER SAMPLES											
Environmental Technical Services				PO. NO. (required) TL		Project Name: LRT ANNUAL TEST		1							
1548 Jacob Avenue						Kevin Richmond		Terminal (LAT)							
San Jose, California 95118															
CLIENT ID	CHK BY SYSTEMS TO BE ANALYZED	DATE	TIME	LAB ID NO	TSS	SPEC COND	TPHG BTEX MTBE 8260	TOG 1664	COD	TTLIC METALS AL, CU, FE, PB, ZN, VN	8081	TOC	TEPH MO		
SW-1	X	12/21/12			X	X	X	X	X	X	X	X	X		
SW-2	X				X	X	X	X	X	X	X	X	X		
SW-3	X	12/21/12			X	X	X	X	X	X	X	X	X		
SW-4	X	12/21/12			X	X	X	X	X	X	X	X	X		
SW-5	X	12/21/12			X	X	X	X	X	X	X	X	X		
SW-6	X	12/21/12			X	X	X	X	X	X	X	X	X		
SW-7	X	12/21/12	2:16		X	X	X	X	X	X	X	X	X		
S PARR SW-10															
S PARR SW-11	X	12/21/12	12:41		X	X	X	X	X	X	X	X	X		
N PARR SW-12	X	12/21/12	1:21		X	X	X	X	X	X	X	X	X		
Sampled/Released By: <u>Heleen Montgomery</u>				Released To: <u>M. D. Hillman</u>											
Print: <u>Heleen Montgomery</u>				Print: <u>M. D. Hillman</u>											
Sign: <u>Heleen Montgomery</u>				Sign: <u>M. D. Hillman</u>											
Date: <u>12/21/12</u>				Date: <u>12/21/12</u>											
Time: <u>1:21</u>				Time: <u>1745</u>											
Released By: _____				Released To: _____											
Print: _____				Print: _____											
Sign: _____				Sign: _____											
Date: _____				Date: _____											
Time: _____				Time: _____											
Released By: _____				Released To: _____											
Print: _____				Print: _____											
Sign: _____				Sign: _____											
Date: _____				Date: _____											
Time: _____				Time: _____											

Notes: Please analyze all Systems checked for all analyses listed. NS=Not Sampled (system wasn't discharging)

Notes: Please analyze all Systems checked for all analyses listed. NS=Not Sampled (system wasn't discharging)

\* = not discharging - Run out of time in fire to date all labels etc. - lab closing - Christmas Eve Monday - Samples collected Friday

# COOLER RECEIPT CHECKLIST



Curtis & Tompkins, Ltd.

Login # 292107 Date Received 12/21/12 Number of coolers 5  
 Client ENTS Project Levin Richmond Terminal  
 Date Opened 12/21/12 By (print) AI (sign) [Signature]  
 Date Logged in ↓ By (print) ↓ (sign) ↓

1. Did cooler come with a shipping slip (airbill, etc) \_\_\_\_\_ YES NO  
 Shipping info \_\_\_\_\_

2A. Were custody seals present? .... ☐ YES (circle) on cooler on samples ☒ NO  
 How many \_\_\_\_\_ Name \_\_\_\_\_ Date \_\_\_\_\_

2B. Were custody seals intact upon arrival? \_\_\_\_\_ YES NO N/A

3. Were custody papers dry and intact when received? \_\_\_\_\_ YES NO

4. Were custody papers filled out properly (ink, signed, etc)? \_\_\_\_\_ YES NO

5. Is the project identifiable from custody papers? (If so fill out top of form) YES NO

6. Indicate the packing in cooler: (if other, describe) \_\_\_\_\_

☒ Bubble Wrap ☐ Foam blocks ☒ Bags ☐ None  
☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation: \* Notify PM if temperature exceeds 6°C

Type of ice used: ☒ Wet ☐ Blue/Gel ☐ None Temp(°C) \_\_\_\_\_

☒ Samples Received on ice & cold without a temperature blank; ~~temp. taken with IR gun~~

☒ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? \_\_\_\_\_ YES NO

If YES, what time were they transferred to freezer? \_\_\_\_\_

9. Did all bottles arrive unbroken/unopened? \_\_\_\_\_ YES NO

10. Are there any missing / extra samples? \_\_\_\_\_ YES NO

11. Are samples in the appropriate containers for indicated tests? \_\_\_\_\_ YES NO

12. Are sample labels present, in good condition and complete? \_\_\_\_\_ YES NO

13. Do the sample labels agree with custody papers? \_\_\_\_\_ YES NO

14. Was sufficient amount of sample sent for tests requested? \_\_\_\_\_ YES NO

15. Are the samples appropriately preserved? \_\_\_\_\_ YES NO N/A

16. Did you check preservatives for all bottles for each sample? \_\_\_\_\_ YES NO N/A

17. Did you document your preservative check? \_\_\_\_\_ YES NO N/A

18. Did you change the hold time in LIMS for unpreserved VOAs? \_\_\_\_\_ YES NO N/A

19. Did you change the hold time in LIMS for preserved terracores? \_\_\_\_\_ YES NO N/A

20. Are bubbles > 6mm absent in VOA samples? \_\_\_\_\_ YES NO N/A

21. Was the client contacted concerning this sample delivery? \_\_\_\_\_ YES NO

If YES, Who was called? \_\_\_\_\_ By \_\_\_\_\_ Date: \_\_\_\_\_

## COMMENTS

4. Samples 1-6 have no time on CDC, some  
 12. sample labels have time, some don't  
 10. 3 VOAs without label, 3 1 liter ambers without  
 labels but cap says 2x, 5x, & 6x. Sample-004  
 has extra 1 liter amber with lid saying "4x" but  
 label says SW-4.

15. received 1 250 poly w/ pH 7.2, added 1 mL H<sub>2</sub>SO<sub>4</sub> (#209049) @ 2055  
 sample-007 12/21/12 to pH 2.

Rev 10, 11/11

# Curtis & Tompkins Sample Preservation for 242107

Sample pH: <2 >9 >12 Other

-001a [ ] [ ] [ ] [ ]  
b [ ] [ ] [ ] [ ]  
c [ ] [ ] [ ] [ ]  
d [ ] [ ] [ ] [ ]  
e [ ] [ ] [ ] [ ]  
f [ ] [ ] [ ] [ ]  
g [ ] [ ] [ ] [ ]  
h [ ] [ ] [ ] [ ]  
i [ ] [ ] [ ] [ ]  
j [ ] [ ] [ ] [ ]  
k [ ] [ ] [ ] [ ]  
l [ ] [ ] [ ] [ ]  
m [ ] [ ] [ ] [ ]

-002a [ ] [ ] [ ] [ ]  
b [ ] [ ] [ ] [ ]  
c [ ] [ ] [ ] [ ]  
d [ ] [ ] [ ] [ ]  
e [ ] [ ] [ ] [ ]  
f [ ] [ ] [ ] [ ]  
g [ ] [ ] [ ] [ ]  
h [ ] [ ] [ ] [ ]  
i [ ] [ ] [ ] [ ]  
j [ ] [ ] [ ] [ ]  
k [ ] [ ] [ ] [ ]  
l [ ] [ ] [ ] [ ]  
m [ ] [ ] [ ] [ ]

-003a [ ] [ ] [ ] [ ]  
b [ ] [ ] [ ] [ ]  
c [ ] [ ] [ ] [ ]  
d [ ] [ ] [ ] [ ]  
e [ ] [ ] [ ] [ ]  
f [ ] [ ] [ ] [ ]  
g [ ] [ ] [ ] [ ]  
h [ ] [ ] [ ] [ ]  
i [ ] [ ] [ ] [ ]  
j [ ] [ ] [ ] [ ]  
k [ ] [ ] [ ] [ ]  
l [ ] [ ] [ ] [ ]  
m [ ] [ ] [ ] [ ]

Sample pH: <2 >9 >12 Other

-004a [ ] [ ] [ ] [ ]  
b [ ] [ ] [ ] [ ]  
c [ ] [ ] [ ] [ ]  
d [ ] [ ] [ ] [ ]  
e [ ] [ ] [ ] [ ]  
f [ ] [ ] [ ] [ ]  
g [ ] [ ] [ ] [ ]  
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m [ ] [ ] [ ] [ ]  
n [ ] [ ] [ ] [ ]

-005a [ ] [ ] [ ] [ ]  
b [ ] [ ] [ ] [ ]  
c [ ] [ ] [ ] [ ]  
d [ ] [ ] [ ] [ ]  
e [ ] [ ] [ ] [ ]  
f [ ] [ ] [ ] [ ]  
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i [ ] [ ] [ ] [ ]  
j [ ] [ ] [ ] [ ]  
k [ ] [ ] [ ] [ ]  
l [ ] [ ] [ ] [ ]  
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-006a [ ] [ ] [ ] [ ]  
b [ ] [ ] [ ] [ ]  
c [ ] [ ] [ ] [ ]  
d [ ] [ ] [ ] [ ]  
e [ ] [ ] [ ] [ ]  
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g [ ] [ ] [ ] [ ]  
h [ ] [ ] [ ] [ ]  
i [ ] [ ] [ ] [ ]  
j [ ] [ ] [ ] [ ]  
k [ ] [ ] [ ] [ ]  
l [ ] [ ] [ ] [ ]  
m [ ] [ ] [ ] [ ]

Sample pH: <2 >9 >12 Other

-007a [ ] [ ] [ ] [ ]  
b [ ] [ ] [ ] [ ]  
c [ ] [ ] [ ] [ ]  
d [ ] [ ] [ ] [ ]  
e [ ] [ ] [ ] [ ]  
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m [ ] [ ] [ ] [ ]

-008a [ ] [ ] [ ] [ ]  
b [ ] [ ] [ ] [ ]  
c [ ] [ ] [ ] [ ]  
d [ ] [ ] [ ] [ ]  
e [ ] [ ] [ ] [ ]  
f [ ] [ ] [ ] [ ]  
g [ ] [ ] [ ] [ ]  
h [ ] [ ] [ ] [ ]  
i [ ] [ ] [ ] [ ]  
j [ ] [ ] [ ] [ ]  
k [ ] [ ] [ ] [ ]  
l [ ] [ ] [ ] [ ]  
m [ ] [ ] [ ] [ ]

-009a [ ] [ ] [ ] [ ]  
b [ ] [ ] [ ] [ ]  
c [ ] [ ] [ ] [ ]  
d [ ] [ ] [ ] [ ]  
e [ ] [ ] [ ] [ ]  
f [ ] [ ] [ ] [ ]  
g [ ] [ ] [ ] [ ]  
h [ ] [ ] [ ] [ ]  
i [ ] [ ] [ ] [ ]  
j [ ] [ ] [ ] [ ]  
k [ ] [ ] [ ] [ ]  
l [ ] [ ] [ ] [ ]  
m [ ] [ ] [ ] [ ]

Analyst: DAH  
Date: 12/21/12  
Page 1 of 1



## Total Extractable Hydrocarbons

Lab #:	242107	Location:	Levin Richmond Terminal
Client:	Environmental Tech. Services	Prep:	EPA 3520C
Project#:	STANDARD	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	12/21/12
Units:	ug/L	Received:	12/21/12
Diln Fac:	1.000	Prepared:	12/26/12
Batch#:	194140	Analyzed:	12/27/12

```
Field ID:      SW-1
Type:          SAMPLE
```

Lab ID: 242107-001

Analyte	Result	RL
Diesel C10-C24	1,500 Y	50
Motor Oil C24-C36	3,300	300

Surrogate	%REC	Limits
o-Terphenyl	87	61-134

Field ID: SW-2  
Type: SAMPLE

Lab ID: 242107-002

Analyte	Result	RL
Diesel C10-C24	2,800 Y	50
Motor Oil C24-C36	5,500	300

Surrogate	%REC	Limits
o-Terphenyl	93	61-134

Field ID: SW-3  
Type: SAMPLE

Lab ID: 242107-003

Analyte	Result	RL
Diesel C10-C24	810 Y	50
Motor Oil C24-C36	2,400	300

Surrogate	%REC	Limits
o-Terphenyl	102	61-134

Field ID: SW-4  
Type: SAMPLE

Lab ID: 242107-004

Analyte	Result	RL
Diesel C10-C24	1,900 Y	50
Motor Oil C24-C36	1,100	300

Surrogate	%REC	Limits
o-Terphenyl	111	61-134

Y= Sample exhibits chromatographic pattern which does not resemble standard  
ND= Not Detected  
RL= Reporting Limit



## Total Extractable Hydrocarbons

Lab #:	242107	Location:	Levin Richmond Terminal
Client:	Environmental Tech. Services	Prep:	EPA 3520C
Project#:	STANDARD	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	12/21/12
Units:	ug/L	Received:	12/21/12
Diln Fac:	1.000	Prepared:	12/26/12
Batch#:	194140	Analyzed:	12/27/12

Field ID: SW-5  
Type: SAMPLE

Lab ID: 242107-005

Analyte	Result	RL
Diesel C10-C24	310 Y	50
Motor Oil C24-C36	550	300

Surrogate	%REC	Limits
o-Terphenyl	123	61-134

Field ID: SW-6  
Type: SAMPLE

Lab ID: 242107-006

Analyte	Result	RL
Diesel C10-C24	160 Y	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
o-Terphenyl	102	61-134

Field ID: SW-7  
Type: SAMPLE

Lab ID: 242107-007

Analyte	Result	RL
Diesel C10-C24	210 Y	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
o-Terphenyl	104	61-134

Field ID: S PARR SW-11  
Type: SAMPLE

Lab ID: 242107-008

Analyte	Result	RL
Diesel C10-C24	330 Y	50
Motor Oil C24-C36	1,500	300

Surrogate	%REC	Limits
o-Terphenyl	110	61-134

Y= Sample exhibits chromatographic pattern which does not resemble standard  
ND= Not Detected  
RL= Reporting Limit

Total Extractable Hydrocarbons			
Lab #:	242107	Location:	Levin Richmond Terminal
Client:	Environmental Tech. Services	Prep:	EPA 3520C
Project#:	STANDARD	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	12/21/12
Units:	ug/L	Received:	12/21/12
Diln Fac:	1.000	Prepared:	12/26/12
Batch#:	194140	Analyzed:	12/27/12

Field ID: N PARR SW-12  
Type: SAMPLE

Lab ID: 242107-009

Analyte	Result	RL
Diesel C10-C24	160 Y	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
o-Terphenyl	87	61-134

Type: BLANK

Lab ID: QC671304

Analyte	Result	RL
Diesel C10-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
o-Terphenyl	99	61-134

Y= Sample exhibits chromatographic pattern which does not resemble standard  
ND= Not Detected  
RL= Reporting Limit  
Page 3 of 3



## Batch QC Report

Total Extractable Hydrocarbons			
Lab #:	242107	Location:	Levin Richmond Terminal
Client:	Environmental Tech. Services	Prep:	EPA 3520C
Project#:	STANDARD	Analysis:	EPA 8015B
Matrix:	Water	Batch#:	194140
Units:	ug/L	Prepared:	12/26/12
Diln Fac:	1.000	Analyzed:	12/27/12

Type: BS Cleanup Method: EPA 3630C  
Lab ID: QC671305

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	2,500	2,264	91	60-120

Surrogate	%REC	Limits
o-Terphenyl	112	61-134

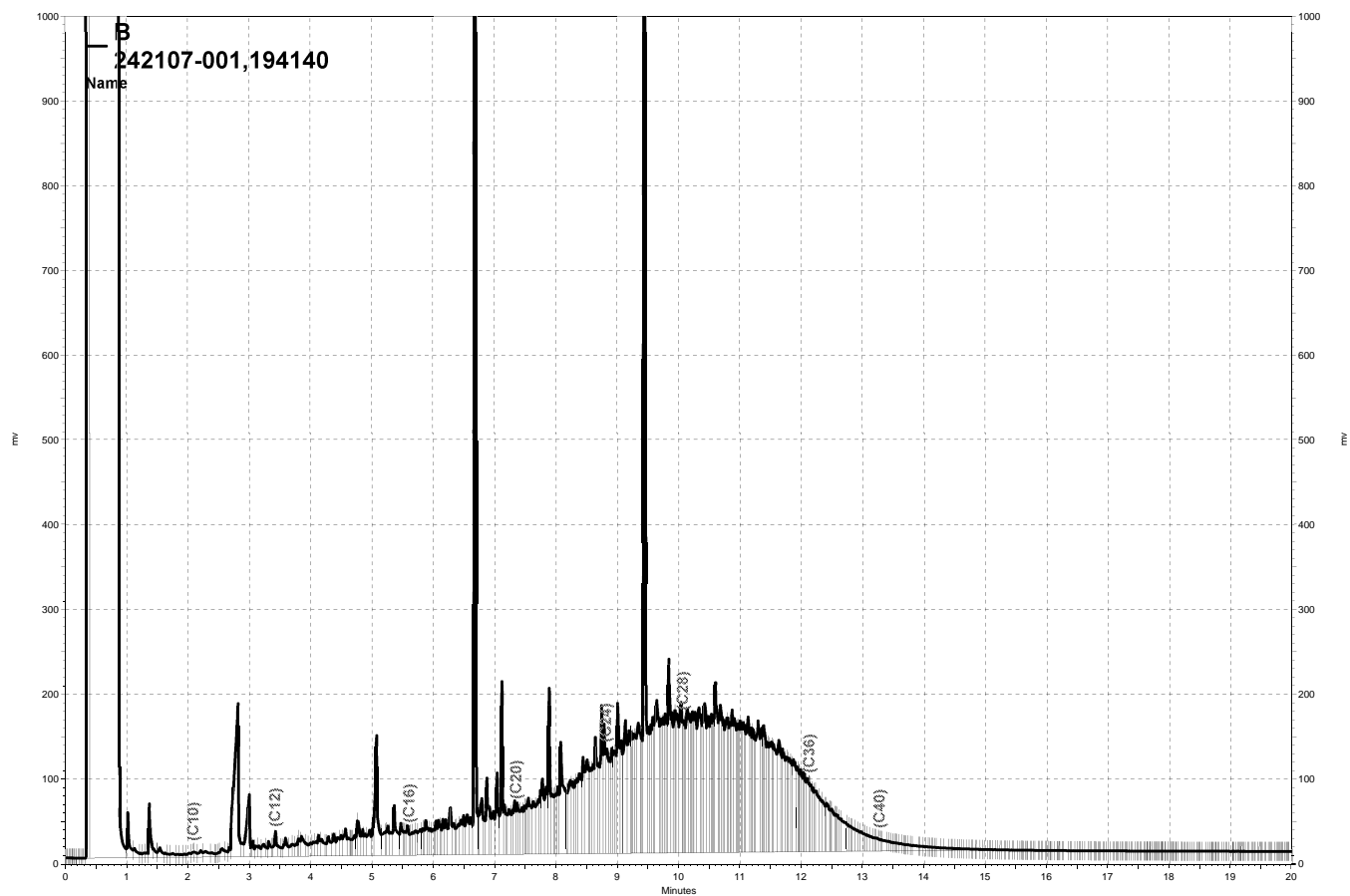
Type: BSD Cleanup Method: EPA 3630C  
Lab ID: QC671306

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	2,500	2,173	87	60-120	4	35

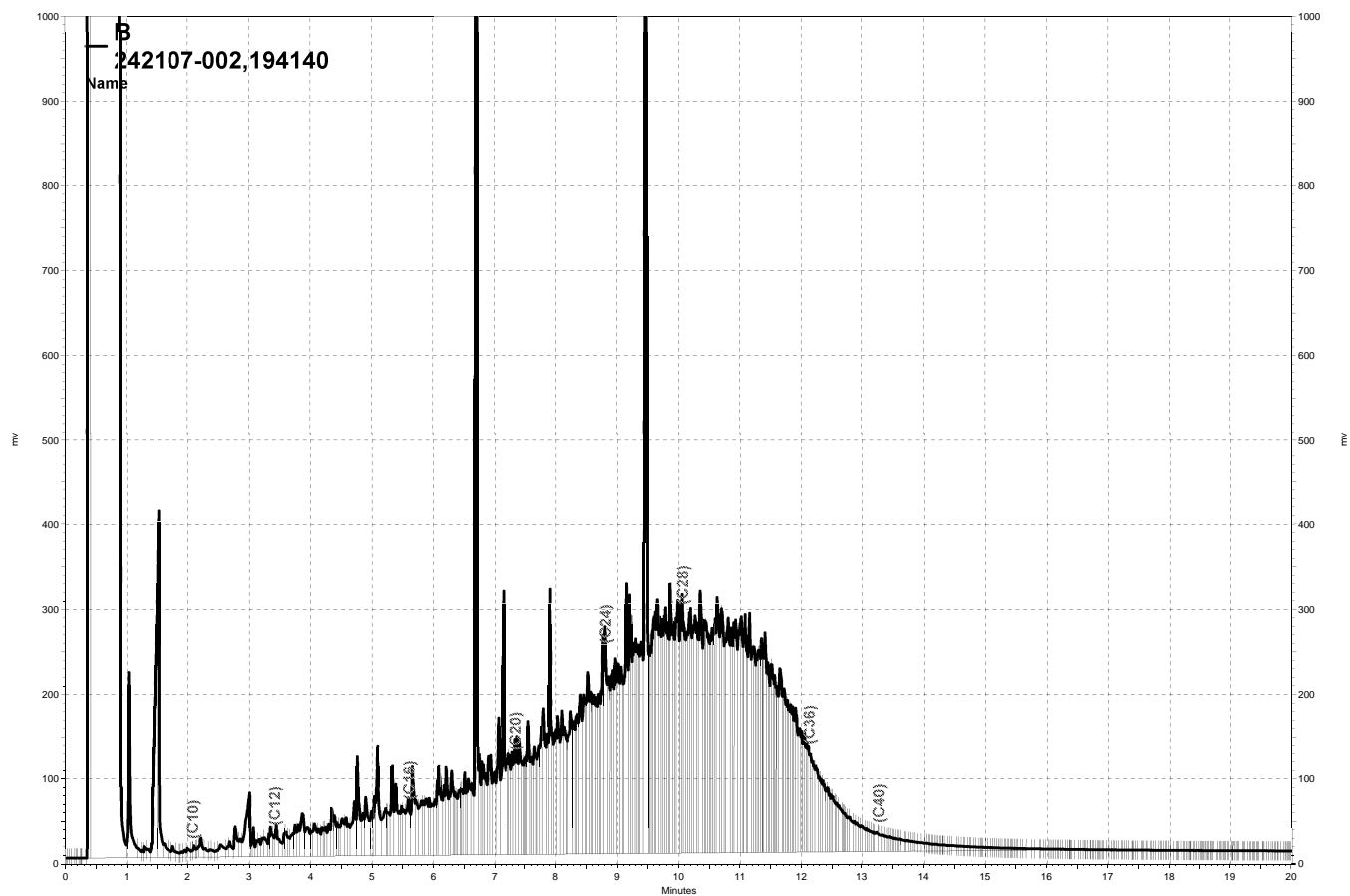
  

Surrogate	%REC	Limits
o-Terphenyl	107	61-134

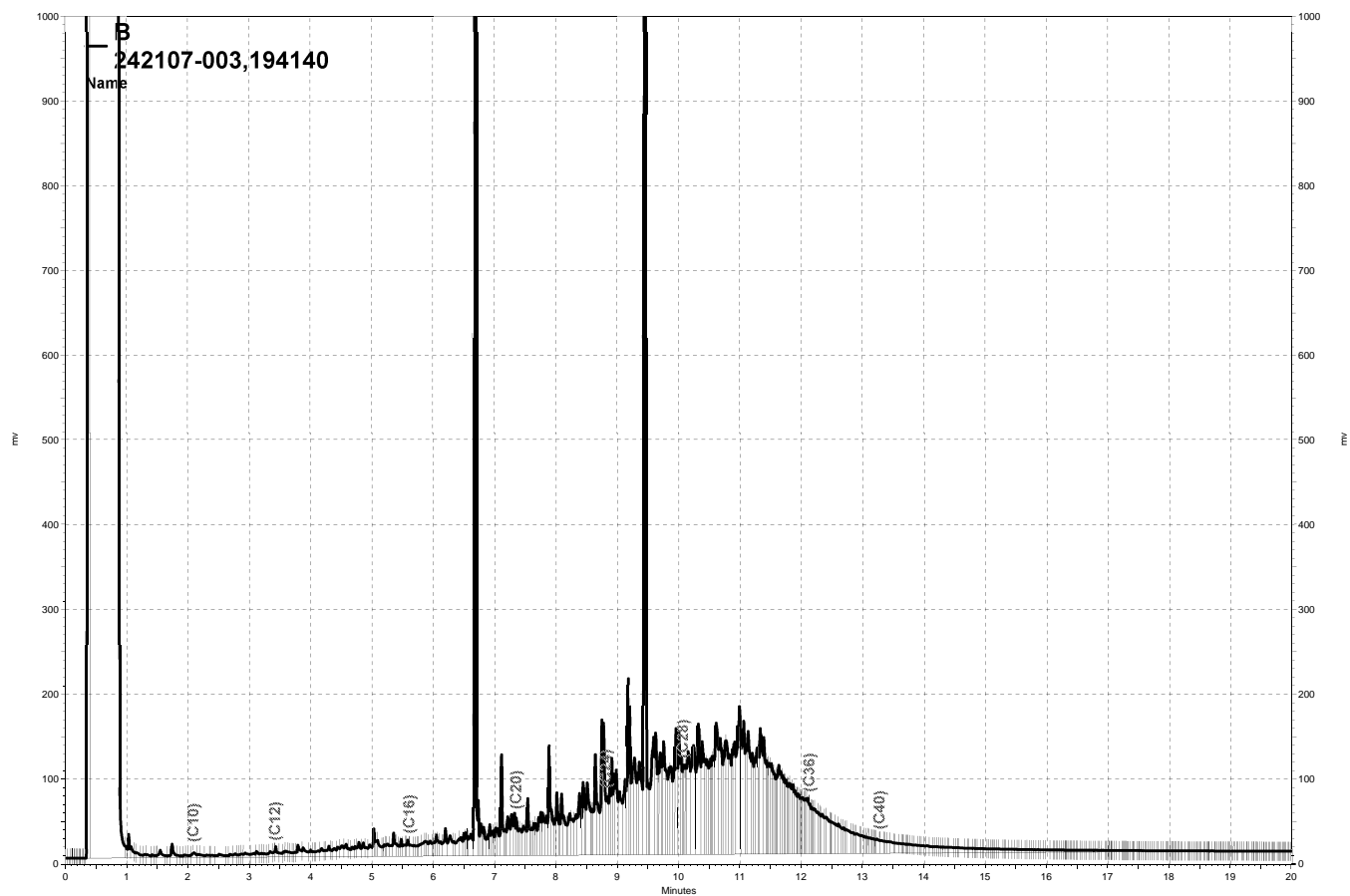
RPD= Relative Percent Difference



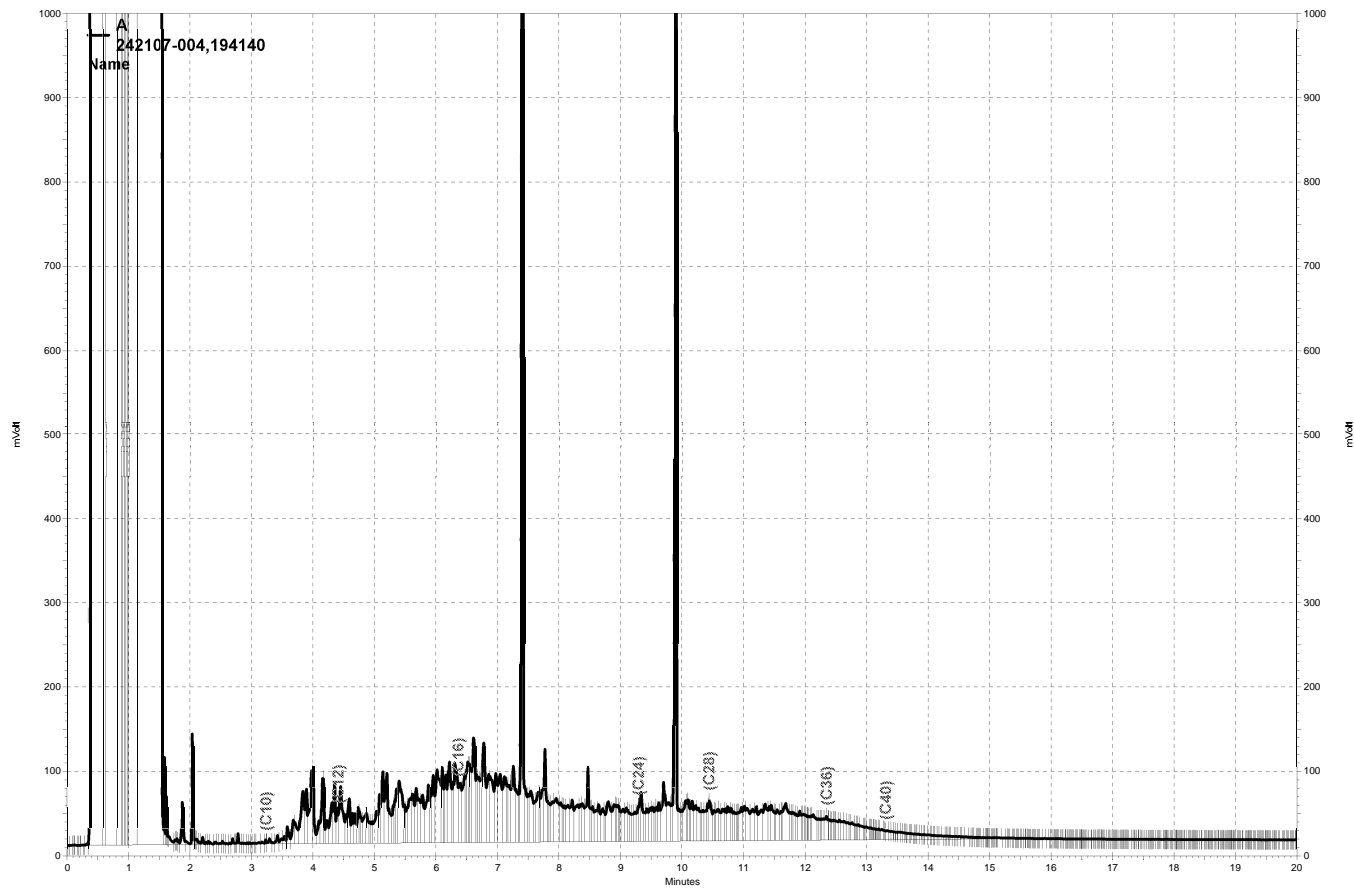
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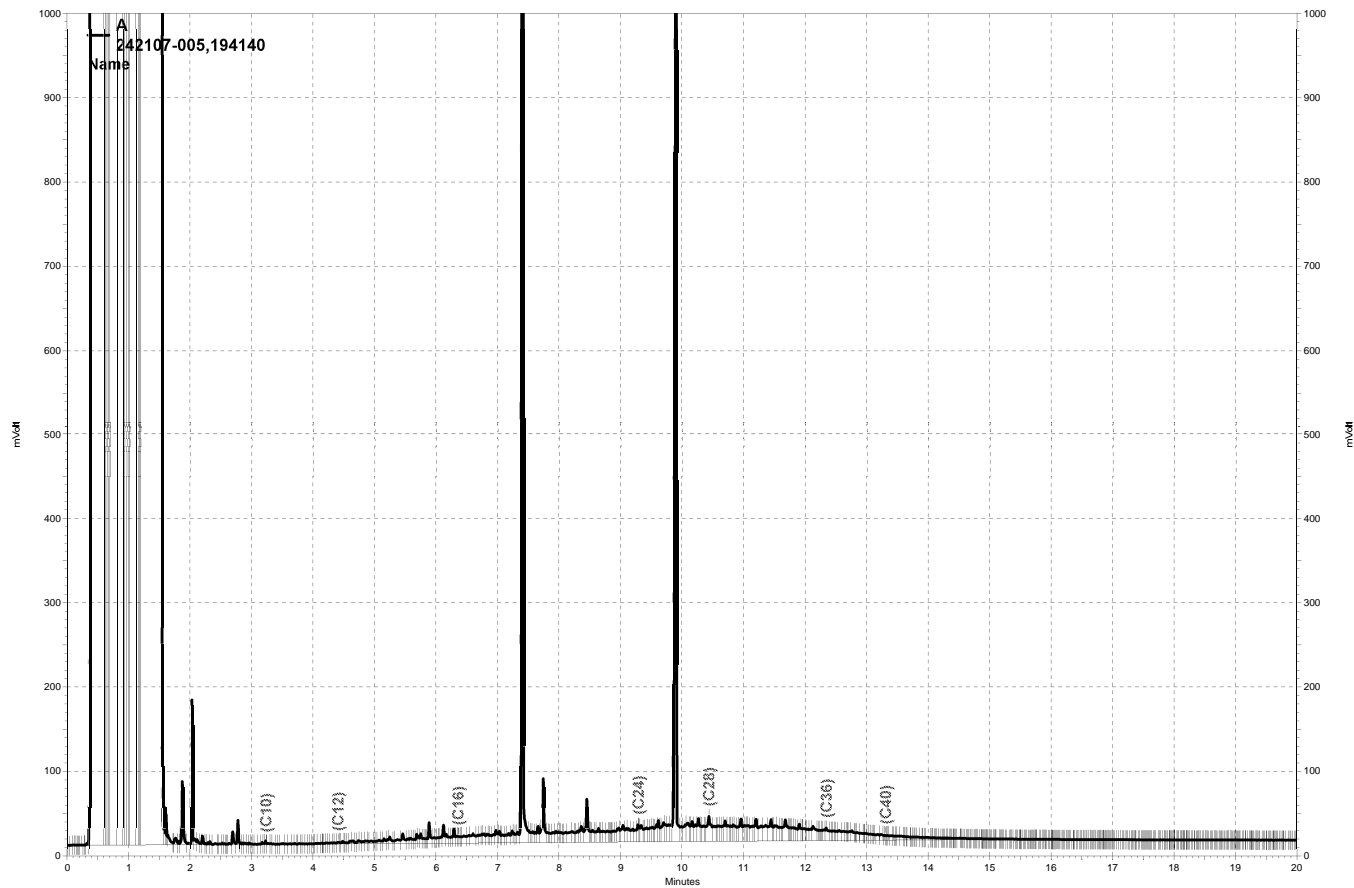
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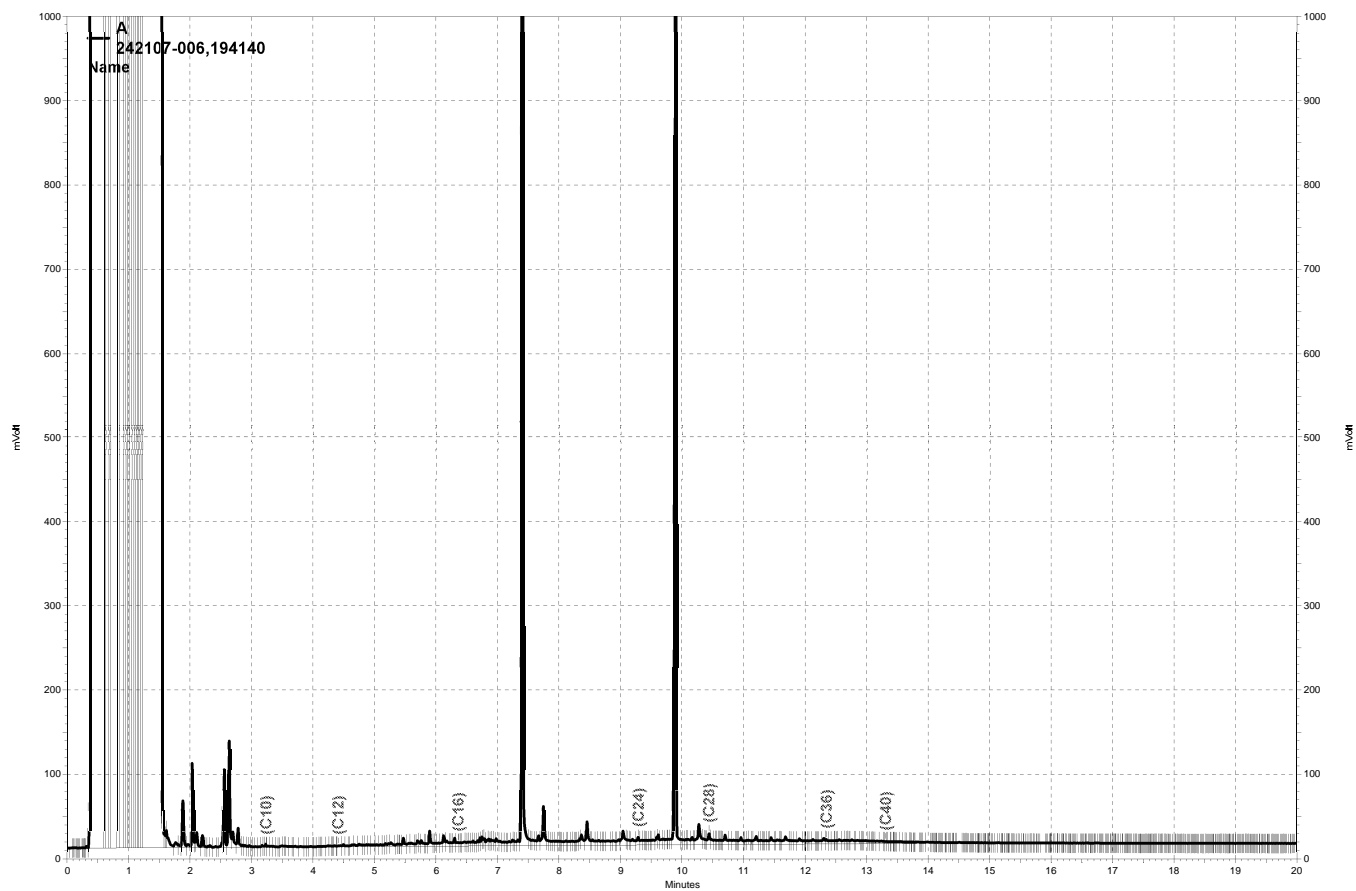
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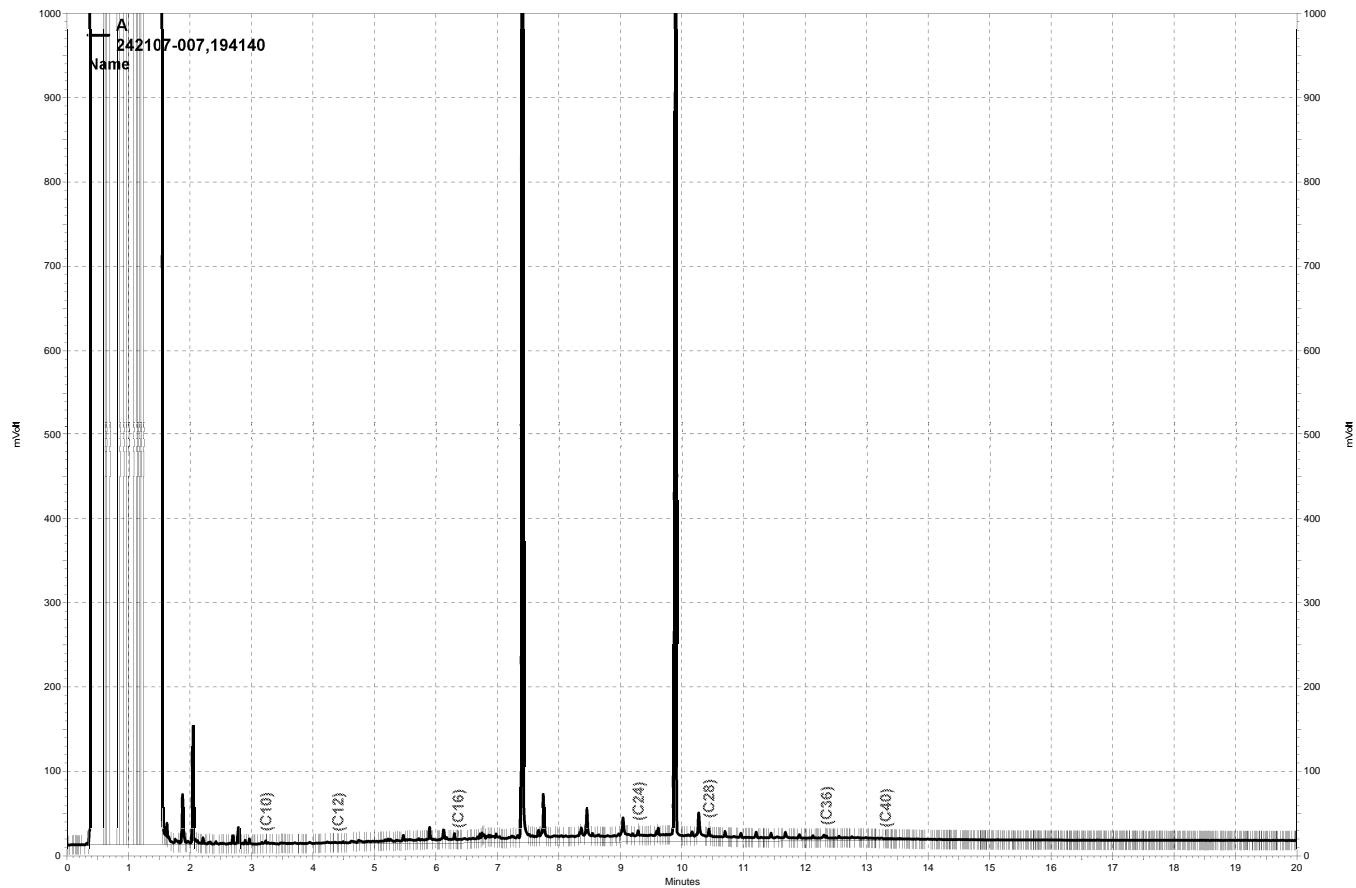
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— \\Lims\gdrive\ezchrom\Projects\GC26\Data\362a016, A

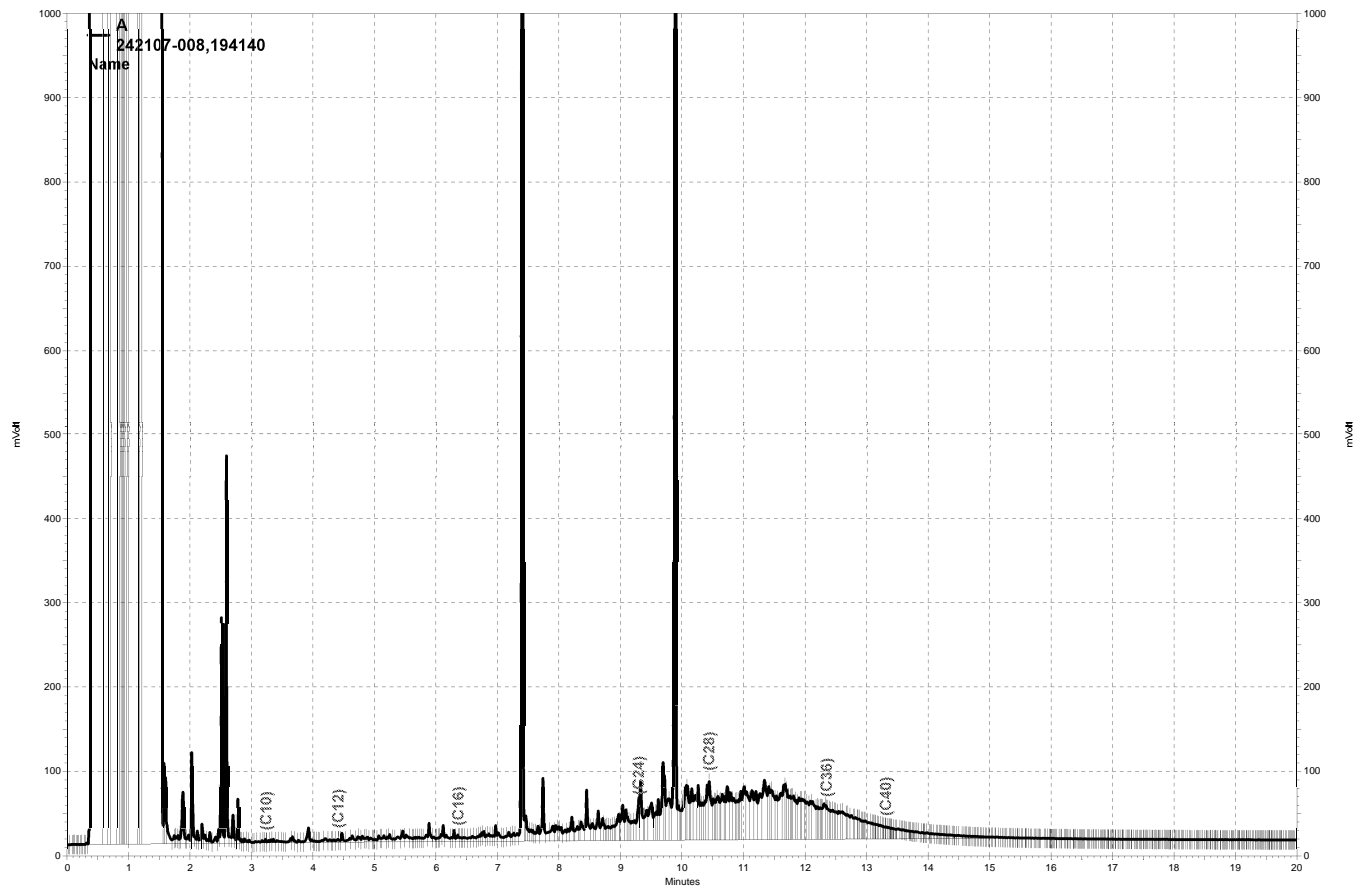


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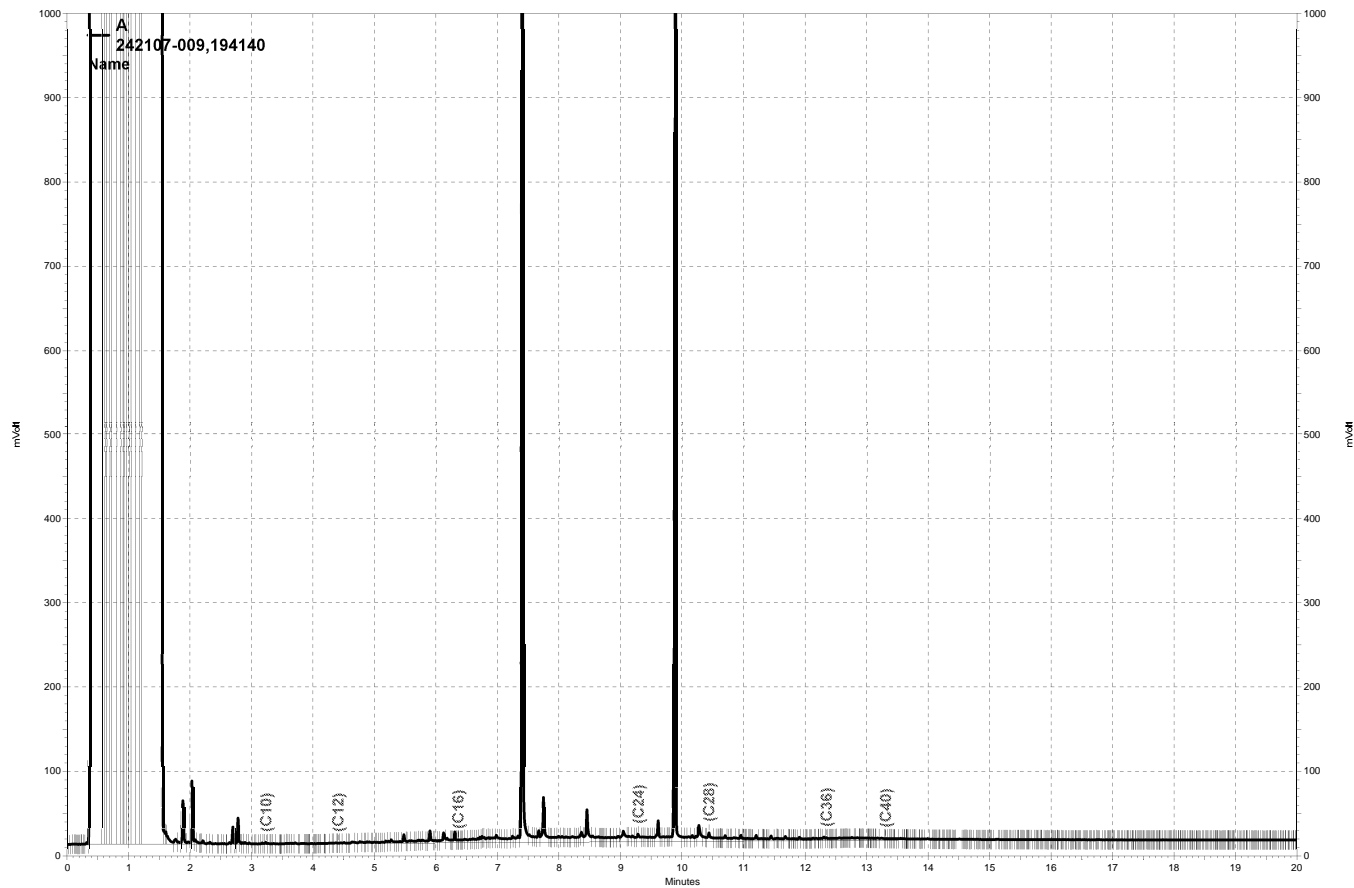


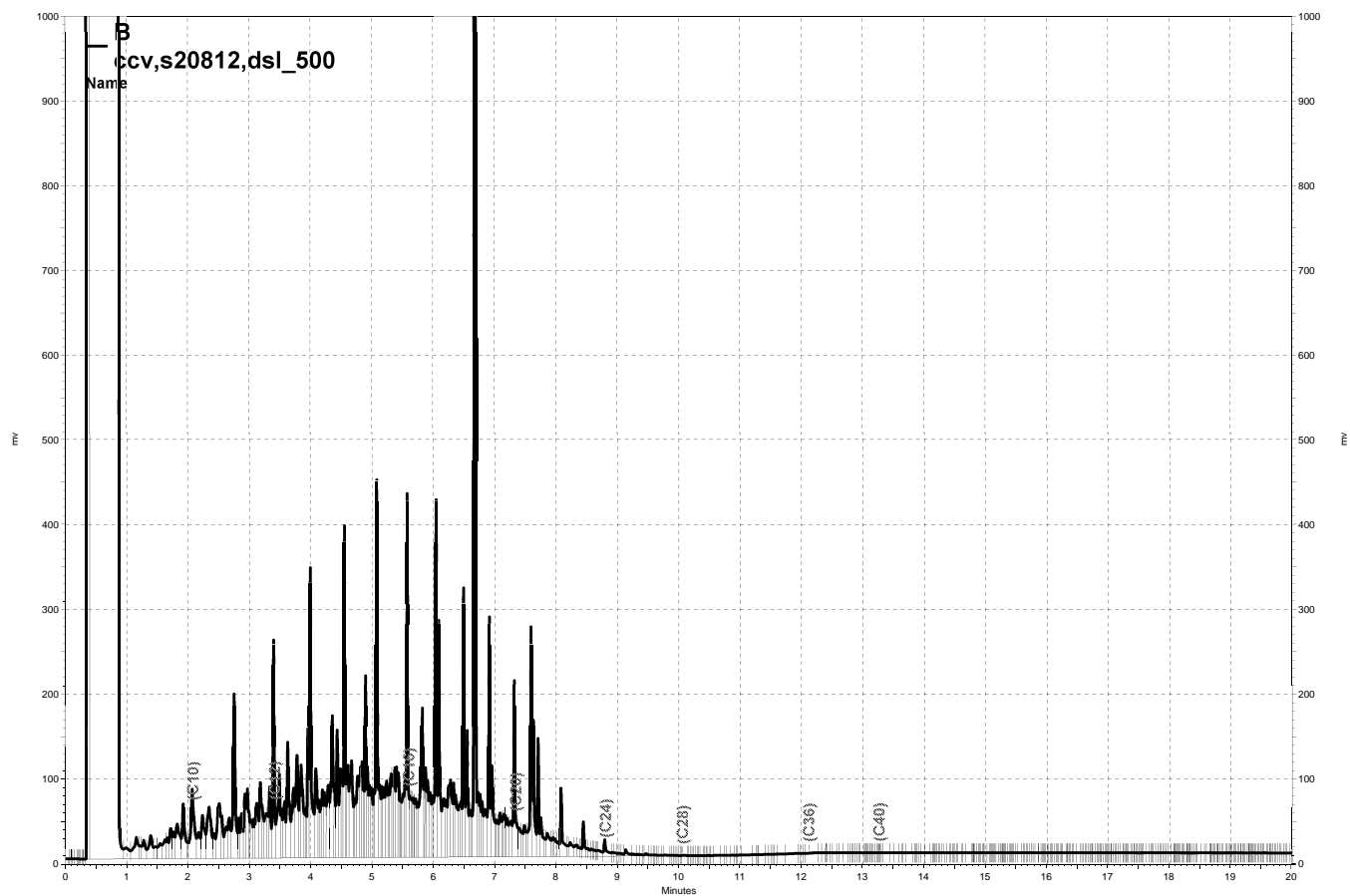
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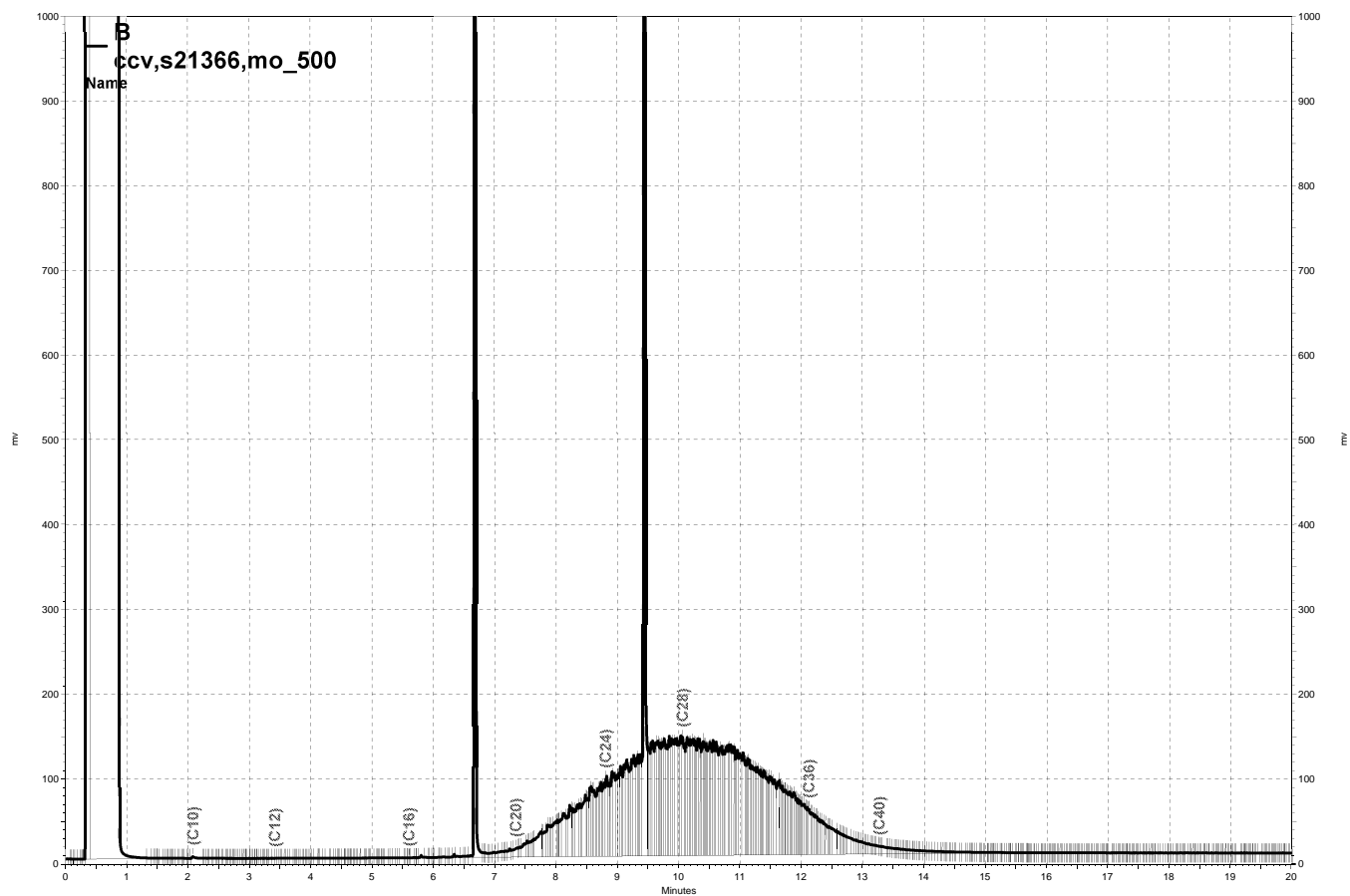


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### Curtis & Tompkins Laboratories Analytical Report

Lab #:	242107	Location:	Levin Richmond Terminal
Client:	Environmental Tech. Services	Prep:	EPA 624
Project#:	STANDARD	Analysis:	EPA 624
Matrix:	Water	Sampled:	12/21/12
Units:	ug/L	Received:	12/21/12
Diln Fac:	1.000		

Field ID:	SW-1	Batch#:	194211
Type:	SAMPLE	Analyzed:	12/31/12
Lab ID:	242107-001		

Analyte	Result	RL
Gasoline C7-C12	ND	50
Benzene	ND	0.5
Toluene	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-127
1,2-Dichloroethane-d4	106	69-148
Toluene-d8	96	80-120
Bromofluorobenzene	105	80-121

Field ID:	SW-2	Batch#:	194211
Type:	SAMPLE	Analyzed:	12/31/12
Lab ID:	242107-002		

Analyte	Result	RL
Gasoline C7-C12	ND	50
Benzene	ND	0.5
Toluene	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	103	80-127
1,2-Dichloroethane-d4	107	69-148
Toluene-d8	99	80-120
Bromofluorobenzene	101	80-121

### Curtis & Tompkins Laboratories Analytical Report

Lab #:	242107	Location:	Levin Richmond Terminal
Client:	Environmental Tech. Services	Prep:	EPA 624
Project#:	STANDARD	Analysis:	EPA 624
Matrix:	Water	Sampled:	12/21/12
Units:	ug/L	Received:	12/21/12
Diln Fac:	1.000		

Field ID:	SW-3	Batch#:	194211
Type:	SAMPLE	Analyzed:	12/31/12
Lab ID:	242107-003		

Analyte	Result	RL
Gasoline C7-C12	ND	50
Benzene	ND	0.5
Toluene	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	103	80-127
1,2-Dichloroethane-d4	110	69-148
Toluene-d8	98	80-120
Bromofluorobenzene	102	80-121

Field ID:	SW-4	Batch#:	194211
Type:	SAMPLE	Analyzed:	12/31/12
Lab ID:	242107-004		

Analyte	Result	RL
Gasoline C7-C12	ND	50
Benzene	ND	0.5
Toluene	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	106	80-127
1,2-Dichloroethane-d4	111	69-148
Toluene-d8	102	80-120
Bromofluorobenzene	105	80-121

### Curtis & Tompkins Laboratories Analytical Report

Lab #:	242107	Location:	Levin Richmond Terminal
Client:	Environmental Tech. Services	Prep:	EPA 624
Project#:	STANDARD	Analysis:	EPA 624
Matrix:	Water	Sampled:	12/21/12
Units:	ug/L	Received:	12/21/12
Diln Fac:	1.000		

Field ID:	SW-5	Batch#:	194211
Type:	SAMPLE	Analyzed:	12/31/12
Lab ID:	242107-005		

Analyte	Result	RL
Gasoline C7-C12	ND	50
Benzene	ND	0.5
Toluene	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	104	80-127
1,2-Dichloroethane-d4	114	69-148
Toluene-d8	101	80-120
Bromofluorobenzene	106	80-121

Field ID:	SW-6	Batch#:	194211
Type:	SAMPLE	Analyzed:	12/31/12
Lab ID:	242107-006		

Analyte	Result	RL
Gasoline C7-C12	ND	50
Benzene	ND	0.5
Toluene	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	103	80-127
1,2-Dichloroethane-d4	114	69-148
Toluene-d8	99	80-120
Bromofluorobenzene	104	80-121

### Curtis & Tompkins Laboratories Analytical Report

Lab #:	242107	Location:	Levin Richmond Terminal
Client:	Environmental Tech. Services	Prep:	EPA 624
Project#:	STANDARD	Analysis:	EPA 624
Matrix:	Water	Sampled:	12/21/12
Units:	ug/L	Received:	12/21/12
Diln Fac:	1.000		

Field ID:	SW-7	Batch#:	194230
Type:	SAMPLE	Analyzed:	01/02/13
Lab ID:	242107-007		

Analyte	Result	RL
Gasoline C7-C12	ND	50
Benzene	ND	0.5
Toluene	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	105	80-127
1,2-Dichloroethane-d4	119	69-148
Toluene-d8	101	80-120
Bromofluorobenzene	105	80-121

Field ID:	S PARR SW-11	Batch#:	194211
Type:	SAMPLE	Analyzed:	12/31/12
Lab ID:	242107-008		

Analyte	Result	RL
Gasoline C7-C12	ND	50
Benzene	ND	0.5
Toluene	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	107	80-127
1,2-Dichloroethane-d4	115	69-148
Toluene-d8	102	80-120
Bromofluorobenzene	109	80-121



### Curtis & Tompkins Laboratories Analytical Report

Lab #:	242107	Location:	Levin Richmond Terminal
Client:	Environmental Tech. Services	Prep:	EPA 624
Project#:	STANDARD	Analysis:	EPA 624
Matrix:	Water	Sampled:	12/21/12
Units:	ug/L	Received:	12/21/12
Diln Fac:	1.000		

Field ID: N PARR SW-12  
 Type: SAMPLE  
 Lab ID: 242107-009

Batch#: 194211  
 Analyzed: 12/31/12

Analyte	Result	RL
Gasoline C7-C12	ND	50
Benzene	ND	0.5
Toluene	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	106	80-127
1,2-Dichloroethane-d4	119	69-148
Toluene-d8	100	80-120
Bromofluorobenzene	109	80-121

Type: BLANK  
 Lab ID: QC671583

Batch#: 194211  
 Analyzed: 12/31/12

Analyte	Result	RL
Gasoline C7-C12	ND	50
Benzene	ND	0.5
Toluene	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	102	80-127
1,2-Dichloroethane-d4	110	69-148
Toluene-d8	99	80-120
Bromofluorobenzene	100	80-121

Type: BLANK  
 Lab ID: QC671653

Batch#: 194230  
 Analyzed: 01/02/13

Analyte	Result	RL
Gasoline C7-C12	ND	50
Benzene	ND	0.5
Toluene	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	105	80-127
1,2-Dichloroethane-d4	114	69-148
Toluene-d8	99	80-120
Bromofluorobenzene	105	80-121

ND= Not Detected  
 RL= Reporting Limit

## Batch QC Report

Curtis & Tompkins Laboratories Analytical Report			
Lab #:	242107	Location:	Levin Richmond Terminal
Client:	Environmental Tech. Services	Prep:	EPA 624
Project#:	STANDARD	Analysis:	EPA 624
Matrix:	Water	Batch#:	194211
Units:	ug/L	Analyzed:	12/31/12
Diln Fac:	1.000		

Type: BS Lab ID: QC671581

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12		NA		
Benzene	18.75	19.59	104	80-123
Toluene	18.75	20.20	108	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-127
1,2-Dichloroethane-d4	100	69-148
Toluene-d8	101	80-120
Bromofluorobenzene	96	80-121

Type: BSD Lab ID: QC671582

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12		NA				
Benzene	18.75	19.20	102	80-123	2	20
Toluene	18.75	19.05	102	80-120	6	20

Surrogate	%REC	Limits
Dibromofluoromethane	103	80-127
1,2-Dichloroethane-d4	102	69-148
Toluene-d8	98	80-120
Bromofluorobenzene	97	80-121

NA= Not Analyzed

RPD= Relative Percent Difference

## Batch QC Report

Curtis & Tompkins Laboratories Analytical Report			
Lab #:	242107	Location:	Levin Richmond Terminal
Client:	Environmental Tech. Services	Prep:	EPA 624
Project#:	STANDARD	Analysis:	EPA 624
Matrix:	Water	Batch#:	194211
Units:	ug/L	Analyzed:	12/31/12
Diln Fac:	1.000		

Type: BS Lab ID: QC671584

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,000	918.9	92	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-127
1,2-Dichloroethane-d4	106	69-148
Toluene-d8	100	80-120
Bromofluorobenzene	95	80-121

Type: BSD Lab ID: QC671585

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	1,000	1,004	100	80-120	9	20

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-127
1,2-Dichloroethane-d4	103	69-148
Toluene-d8	100	80-120
Bromofluorobenzene	97	80-121

RPD= Relative Percent Difference

## Batch QC Report

Curtis & Tompkins Laboratories Analytical Report			
Lab #:	242107	Location:	Levin Richmond Terminal
Client:	Environmental Tech. Services	Prep:	EPA 624
Project#:	STANDARD	Analysis:	EPA 624
Matrix:	Water	Batch#:	194230
Units:	ug/L	Analyzed:	01/02/13
Diln Fac:	1.000		

Type: BS Lab ID: QC671651

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12		NA		
Benzene	25.00	25.03	100	80-123
Toluene	25.00	25.41	102	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	106	80-127
1,2-Dichloroethane-d4	110	69-148
Toluene-d8	100	80-120
Bromofluorobenzene	100	80-121

Type: BSD Lab ID: QC671652

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12		NA				
Benzene	25.00	26.99	108	80-123	8	20
Toluene	25.00	27.09	108	80-120	6	20

Surrogate	%REC	Limits
Dibromofluoromethane	103	80-127
1,2-Dichloroethane-d4	111	69-148
Toluene-d8	100	80-120
Bromofluorobenzene	99	80-121

NA= Not Analyzed

RPD= Relative Percent Difference

## Batch QC Report

Curtis & Tompkins Laboratories Analytical Report			
Lab #:	242107	Location:	Levin Richmond Terminal
Client:	Environmental Tech. Services	Prep:	EPA 624
Project#:	STANDARD	Analysis:	EPA 624
Matrix:	Water	Batch#:	194230
Units:	ug/L	Analyzed:	01/02/13
Diln Fac:	1.000		

Type: BS Lab ID: QC671654

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,000	936.7	94	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	98	80-127
1,2-Dichloroethane-d4	113	69-148
Toluene-d8	99	80-120
Bromofluorobenzene	104	80-121

Type: BSD Lab ID: QC671655

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	1,000	1,050	105	80-120	11	20

Surrogate	%REC	Limits
Dibromofluoromethane	102	80-127
1,2-Dichloroethane-d4	108	69-148
Toluene-d8	101	80-120
Bromofluorobenzene	102	80-121

RPD= Relative Percent Difference

Organochlorine Pesticides			
Lab #:	242107	Location:	Levin Richmond Terminal
Client:	Environmental Tech. Services	Prep:	EPA 3520C
Project#:	STANDARD	Analysis:	EPA 8081A
Field ID:	SW-1	Batch#:	194132
Lab ID:	242107-001	Sampled:	12/21/12
Matrix:	Water	Received:	12/21/12
Units:	ug/L	Prepared:	12/26/12
Diln Fac:	3.000	Analyzed:	12/27/12

Analyte	Result	RL
alpha-BHC	ND	0.1
beta-BHC	ND	0.1
gamma-BHC	ND	0.1
delta-BHC	ND	0.1
Heptachlor	ND	0.1
Aldrin	ND	0.1
Heptachlor epoxide	ND	0.1
Endosulfan I	ND	0.1
Dieldrin	ND	0.3
4,4'-DDE	ND	0.3
Endrin	ND #	0.3
Endosulfan II	ND	0.3
Endosulfan sulfate	ND	0.3
4,4'-DDD	ND	0.3
Endrin aldehyde	ND	0.3
4,4'-DDT	ND	0.3
alpha-Chlordane	ND	0.1
gamma-Chlordane	ND	0.1
Methoxychlor	ND	1.4
Toxaphene	ND	2.8

Surrogate	%REC	Limits
TCMX	55	26-128
Decachlorobiphenyl	73	29-122

#= CCV drift outside limits; average CCV drift within limits per method requirements  
ND= Not Detected  
RL= Reporting Limit

Organochlorine Pesticides			
Lab #:	242107	Location:	Levin Richmond Terminal
Client:	Environmental Tech. Services	Prep:	EPA 3520C
Project#:	STANDARD	Analysis:	EPA 8081A
Field ID:	SW-2	Batch#:	194132
Lab ID:	242107-002	Sampled:	12/21/12
Matrix:	Water	Received:	12/21/12
Units:	ug/L	Prepared:	12/26/12
Diln Fac:	3.000	Analyzed:	12/27/12

Analyte	Result	RL
alpha-BHC	ND	0.1
beta-BHC	ND	0.1
gamma-BHC	ND	0.1
delta-BHC	ND	0.1
Heptachlor	ND	0.1
Aldrin	ND	0.1
Heptachlor epoxide	ND	0.1
Endosulfan I	ND	0.1
Dieldrin	ND	0.3
4,4'-DDE	ND	0.3
Endrin	ND #	0.3
Endosulfan II	ND	0.3
Endosulfan sulfate	ND	0.3
4,4'-DDD	ND	0.3
Endrin aldehyde	ND	0.3
4,4'-DDT	ND	0.3
alpha-Chlordane	ND	0.1
gamma-Chlordane	ND	0.1
Methoxychlor	ND	1.4
Toxaphene	ND	2.8

Surrogate	%REC	Limits
TCMX	65	26-128
Decachlorobiphenyl	36	29-122

#= CCV drift outside limits; average CCV drift within limits per method requirements  
ND= Not Detected  
RL= Reporting Limit

Organochlorine Pesticides			
Lab #:	242107	Location:	Levin Richmond Terminal
Client:	Environmental Tech. Services	Prep:	EPA 3520C
Project#:	STANDARD	Analysis:	EPA 8081A
Field ID:	SW-3	Batch#:	194132
Lab ID:	242107-003	Sampled:	12/21/12
Matrix:	Water	Received:	12/21/12
Units:	ug/L	Prepared:	12/26/12
Diln Fac:	3.000	Analyzed:	12/27/12

Analyte	Result	RL
alpha-BHC	ND	0.1
beta-BHC	ND	0.1
gamma-BHC	ND	0.1
delta-BHC	ND	0.1
Heptachlor	ND	0.1
Aldrin	ND	0.1
Heptachlor epoxide	ND	0.1
Endosulfan I	ND	0.1
Dieldrin	ND	0.3
4,4'-DDE	ND	0.3
Endrin	ND #	0.3
Endosulfan II	ND	0.3
Endosulfan sulfate	ND	0.3
4,4'-DDD	ND	0.3
Endrin aldehyde	ND	0.3
4,4'-DDT	ND	0.3
alpha-Chlordane	ND	0.1
gamma-Chlordane	ND	0.1
Methoxychlor	ND	1.4
Toxaphene	ND	2.8

Surrogate	%REC	Limits
TCMX	87	26-128
Decachlorobiphenyl	59	29-122

#= CCV drift outside limits; average CCV drift within limits per method requirements  
ND= Not Detected  
RL= Reporting Limit



Organochlorine Pesticides			
Lab #:	242107	Location:	Levin Richmond Terminal
Client:	Environmental Tech. Services	Prep:	EPA 3520C
Project#:	STANDARD	Analysis:	EPA 8081A
Field ID:	SW-4	Batch#:	194132
Lab ID:	242107-004	Sampled:	12/21/12
Matrix:	Water	Received:	12/21/12
Units:	ug/L	Prepared:	12/26/12
Diln Fac:	3.000	Analyzed:	12/27/12

Analyte	Result	RL
alpha-BHC	ND	0.1
beta-BHC	ND	0.1
gamma-BHC	ND	0.1
delta-BHC	ND	0.1
Heptachlor	ND	0.1
Aldrin	ND	0.1
Heptachlor epoxide	ND	0.1
Endosulfan I	ND	0.1
Dieldrin	ND	0.3
4,4'-DDE	ND	0.3
Endrin	ND #	0.3
Endosulfan II	ND	0.3
Endosulfan sulfate	ND	0.3
4,4'-DDD	ND	0.3
Endrin aldehyde	ND	0.3
4,4'-DDT	ND	0.3
alpha-Chlordane	ND	0.1
gamma-Chlordane	ND	0.1
Methoxychlor	ND	1.4
Toxaphene	ND	2.8

Surrogate	%REC	Limits
TCMX	83	26-128
Decachlorobiphenyl	52	29-122

#= CCV drift outside limits; average CCV drift within limits per method requirements  
ND= Not Detected  
RL= Reporting Limit

### Organochlorine Pesticides

Lab #:	242107	Location:	Levin Richmond Terminal
Client:	Environmental Tech. Services	Prep:	EPA 3520C
Project#:	STANDARD	Analysis:	EPA 8081A
Field ID:	SW-5	Batch#:	194132
Lab ID:	242107-005	Sampled:	12/21/12
Matrix:	Water	Received:	12/21/12
Units:	ug/L	Prepared:	12/26/12
Diln Fac:	1.000	Analyzed:	12/27/12

Analyte	Result	RL
alpha-BHC	ND	0.05
beta-BHC	ND	0.05
gamma-BHC	ND	0.05
delta-BHC	0.07 C	0.05
Heptachlor	ND	0.05
Aldrin	ND	0.05
Heptachlor epoxide	ND	0.05
Endosulfan I	ND	0.05
Dieldrin	ND	0.09
4,4'-DDE	ND	0.09
Endrin	ND #	0.09
Endosulfan II	ND	0.09
Endosulfan sulfate	ND	0.09
4,4'-DDD	ND	0.09
Endrin aldehyde	ND	0.09
4,4'-DDT	ND	0.09
alpha-Chlordane	ND	0.05
gamma-Chlordane	ND	0.05
Methoxychlor	ND	0.5
Toxaphene	ND	0.9

Surrogate	%REC	Limits
TCMX	91	26-128
Decachlorobiphenyl	61	29-122

#= CCV drift outside limits; average CCV drift within limits per method requirements

C= Presence confirmed, but RPD between columns exceeds 40%

ND= Not Detected

RL= Reporting Limit

### Organochlorine Pesticides

Lab #:	242107	Location:	Levin Richmond Terminal
Client:	Environmental Tech. Services	Prep:	EPA 3520C
Project#:	STANDARD	Analysis:	EPA 8081A
Field ID:	SW-6	Batch#:	194132
Lab ID:	242107-006	Sampled:	12/21/12
Matrix:	Water	Received:	12/21/12
Units:	ug/L	Prepared:	12/26/12
Diln Fac:	1.000	Analyzed:	12/27/12

Analyte	Result	RL
alpha-BHC	ND	0.05
beta-BHC	ND	0.05
gamma-BHC	ND	0.05
delta-BHC	ND	0.05
Heptachlor	ND	0.05
Aldrin	ND	0.05
Heptachlor epoxide	ND	0.05
Endosulfan I	ND	0.05
Dieldrin	ND	0.09
4,4'-DDE	ND	0.09
Endrin	ND #	0.09
Endosulfan II	ND	0.09
Endosulfan sulfate	ND	0.09
4,4'-DDD	ND	0.09
Endrin aldehyde	ND	0.09
4,4'-DDT	ND	0.09
alpha-Chlordane	ND	0.05
gamma-Chlordane	ND	0.05
Methoxychlor	ND	0.5
Toxaphene	ND	0.9

Surrogate	%REC	Limits
TCMX	84	26-128
Decachlorobiphenyl	62	29-122

#= CCV drift outside limits; average CCV drift within limits per method requirements  
ND= Not Detected  
RL= Reporting Limit

Organochlorine Pesticides			
Lab #:	242107	Location:	Levin Richmond Terminal
Client:	Environmental Tech. Services	Prep:	EPA 3520C
Project#:	STANDARD	Analysis:	EPA 8081A
Field ID:	SW-7	Batch#:	194132
Lab ID:	242107-007	Sampled:	12/21/12
Matrix:	Water	Received:	12/21/12
Units:	ug/L	Prepared:	12/26/12
Diln Fac:	1.000	Analyzed:	12/27/12

Analyte	Result	RL
alpha-BHC	ND	0.05
beta-BHC	ND	0.05
gamma-BHC	ND	0.05
delta-BHC	ND	0.05
Heptachlor	ND	0.05
Aldrin	ND	0.05
Heptachlor epoxide	ND	0.05
Endosulfan I	ND	0.05
Dieldrin	ND	0.09
4,4'-DDE	ND	0.09
Endrin	ND #	0.09
Endosulfan II	ND	0.09
Endosulfan sulfate	ND	0.09
4,4'-DDD	ND	0.09
Endrin aldehyde	ND	0.09
4,4'-DDT	ND	0.09
alpha-Chlordane	ND	0.05
gamma-Chlordane	ND	0.05
Methoxychlor	ND	0.5
Toxaphene	ND	0.9

Surrogate	%REC	Limits
TCMX	81	26-128
Decachlorobiphenyl	59	29-122

#= CCV drift outside limits; average CCV drift within limits per method requirements  
ND= Not Detected  
RL= Reporting Limit

Organochlorine Pesticides			
Lab #:	242107	Location:	Levin Richmond Terminal
Client:	Environmental Tech. Services	Prep:	EPA 3520C
Project#:	STANDARD	Analysis:	EPA 8081A
Field ID:	S PARR SW-11	Batch#:	194132
Lab ID:	242107-008	Sampled:	12/21/12
Matrix:	Water	Received:	12/21/12
Units:	ug/L	Prepared:	12/26/12
Diln Fac:	5.000	Analyzed:	12/27/12

Analyte	Result	RL
alpha-BHC	ND	0.2
beta-BHC	ND	0.2
gamma-BHC	ND	0.2
delta-BHC	ND	0.2
Heptachlor	ND	0.2
Aldrin	ND	0.2
Heptachlor epoxide	ND	0.2
Endosulfan I	ND	0.2
Dieldrin	ND	0.5
4,4'-DDE	ND	0.5
Endrin	ND #	0.5
Endosulfan II	ND	0.5
Endosulfan sulfate	ND	0.5
4,4'-DDD	ND	0.5
Endrin aldehyde	ND	0.5
4,4'-DDT	0.7	0.5
alpha-Chlordane	ND	0.2
gamma-Chlordane	ND	0.2
Methoxychlor	ND	2.3
Toxaphene	ND	4.7

Surrogate	%REC	Limits
TCMX	111	26-128
Decachlorobiphenyl	67	29-122

#= CCV drift outside limits; average CCV drift within limits per method requirements  
ND= Not Detected  
RL= Reporting Limit

Organochlorine Pesticides			
Lab #:	242107	Location:	Levin Richmond Terminal
Client:	Environmental Tech. Services	Prep:	EPA 3520C
Project#:	STANDARD	Analysis:	EPA 8081A
Field ID:	N PARR SW-12	Batch#:	194132
Lab ID:	242107-009	Sampled:	12/21/12
Matrix:	Water	Received:	12/21/12
Units:	ug/L	Prepared:	12/26/12
Diln Fac:	1.000	Analyzed:	12/27/12

Analyte	Result	RL
alpha-BHC	ND	0.05
beta-BHC	ND	0.05
gamma-BHC	ND	0.05
delta-BHC	ND	0.05
Heptachlor	ND	0.05
Aldrin	ND	0.05
Heptachlor epoxide	ND	0.05
Endosulfan I	ND	0.05
Dieldrin	ND	0.09
4,4'-DDE	ND	0.09
Endrin	ND #	0.09
Endosulfan II	ND	0.09
Endosulfan sulfate	ND	0.09
4,4'-DDD	ND	0.09
Endrin aldehyde	ND	0.09
4,4'-DDT	ND	0.09
alpha-Chlordane	ND	0.05
gamma-Chlordane	ND	0.05
Methoxychlor	ND	0.5
Toxaphene	ND	0.9

Surrogate	%REC	Limits
TCMX	83	26-128
Decachlorobiphenyl	53	29-122

#= CCV drift outside limits; average CCV drift within limits per method requirements  
ND= Not Detected  
RL= Reporting Limit

## Batch QC Report

Organochlorine Pesticides			
Lab #:	242107	Location:	Levin Richmond Terminal
Client:	Environmental Tech. Services	Prep:	EPA 3520C
Project#:	STANDARD	Analysis:	EPA 8081A
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC671278	Batch#:	194132
Matrix:	Water	Prepared:	12/26/12
Units:	ug/L	Analyzed:	12/27/12

Analyte	Result	RL
alpha-BHC	ND	0.05
beta-BHC	ND	0.05
gamma-BHC	ND	0.05
delta-BHC	ND	0.05
Heptachlor	ND	0.05
Aldrin	ND	0.05
Heptachlor epoxide	ND	0.05
Endosulfan I	ND	0.05
Dieldrin	ND	0.1
4,4'-DDE	ND	0.1
Endrin	ND #	0.1
Endosulfan II	ND	0.1
Endosulfan sulfate	ND	0.1
4,4'-DDD	ND	0.1
Endrin aldehyde	ND	0.1
4,4'-DDT	ND	0.1
alpha-Chlordane	ND	0.05
gamma-Chlordane	ND	0.05
Methoxychlor	ND	0.5
Toxaphene	ND	1.0

Surrogate	%REC	Limits
TCMX	68	26-128
Decachlorobiphenyl	70	29-122

#= CCV drift outside limits; average CCV drift within limits per method requirements  
ND= Not Detected  
RL= Reporting Limit

## Batch QC Report

Organochlorine Pesticides			
Lab #:	242107	Location:	Levin Richmond Terminal
Client:	Environmental Tech. Services	Prep:	EPA 3520C
Project#:	STANDARD	Analysis:	EPA 8081A
Matrix:	Water	Batch#:	194132
Units:	ug/L	Prepared:	12/26/12
Diln Fac:	1.000	Analyzed:	12/27/12

Type: BS Lab ID: QC671279

Analyte	Spiked	Result	%REC	Limits
gamma-BHC	0.2000	0.1752	88	51-142
Heptachlor	0.2000	0.1668	83	44-136
Aldrin	0.2000	0.1707	85	49-129
Dieldrin	0.4000	0.3383	85	51-149
Endrin	0.4000	0.3173 #	79	44-147
4,4'-DDT	0.4000	0.3362	84	44-153

Surrogate	%REC	Limits
TCMX	72	26-128
Decachlorobiphenyl	68	29-122

Type: BSD Lab ID: QC671280

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
gamma-BHC	0.2000	0.1816	91	51-142	4	20
Heptachlor	0.2000	0.1733	87	44-136	4	29
Aldrin	0.2000	0.1737	87	49-129	2	34
Dieldrin	0.4000	0.3635	91	51-149	7	37
Endrin	0.4000	0.3360 #	84	44-147	6	39
4,4'-DDT	0.4000	0.3662	92	44-153	9	37

Surrogate	%REC	Limits
TCMX	75	26-128
Decachlorobiphenyl	78	29-122

#= CCV drift outside limits; average CCV drift within limits per method requirements  
RPD= Relative Percent Difference



### Metals Analytical Report

Lab #:	242107	Location:	Levin Richmond Terminal
Client:	Environmental Tech. Services	Prep:	EPA 200.8
Project#:	STANDARD	Analysis:	EPA 200.8
Analyte:	Aluminum	Sampled:	12/21/12
Matrix:	Water	Received:	12/21/12
Units:	ug/L	Prepared:	12/28/12
Diln Fac:	5.000	Analyzed:	12/28/12
Batch#:	194173		

Field ID	Type	Lab ID	Result	RL
SW-1	SAMPLE	242107-001	2,600	50
SW-2	SAMPLE	242107-002	1,900	50
SW-3	SAMPLE	242107-003	390	50
SW-4	SAMPLE	242107-004	350	50
SW-5	SAMPLE	242107-005	150	50
SW-6	SAMPLE	242107-006	190	50
SW-7	SAMPLE	242107-007	210	50
S PARR SW-11	SAMPLE	242107-008	600	50
N PARR SW-12	SAMPLE	242107-009	1,100	50
	BLANK	QC671431	ND	50

ND= Not Detected  
RL= Reporting Limit

### Metals Analytical Report

Lab #:	242107	Location:	Levin Richmond Terminal
Client:	Environmental Tech. Services	Prep:	EPA 200.8
Project#:	STANDARD	Analysis:	EPA 200.8
Analyte:	Copper	Sampled:	12/21/12
Matrix:	Water	Received:	12/21/12
Units:	ug/L	Prepared:	12/28/12
Diln Fac:	5.000	Analyzed:	12/28/12
Batch#:	194173		

Field ID	Type	Lab ID	Result	RL
SW-1	SAMPLE	242107-001	170	2.3
SW-2	SAMPLE	242107-002	120	2.3
SW-3	SAMPLE	242107-003	7.7	2.3
SW-4	SAMPLE	242107-004	6.3	2.3
SW-5	SAMPLE	242107-005	5.4	2.3
SW-6	SAMPLE	242107-006	9.0	2.3
SW-7	SAMPLE	242107-007	8.5	2.3
S PARR SW-11	SAMPLE	242107-008	5.2	2.3
N PARR SW-12	SAMPLE	242107-009	16	2.3
	BLANK	QC671431	ND	2.3

ND= Not Detected  
 RL= Reporting Limit

### Metals Analytical Report

Lab #:	242107	Location:	Levin Richmond Terminal
Client:	Environmental Tech. Services	Prep:	EPA 200.8
Project#:	STANDARD	Analysis:	EPA 200.8
Analyte:	Iron	Sampled:	12/21/12
Matrix:	Water	Received:	12/21/12
Units:	ug/L	Prepared:	12/28/12
Diln Fac:	5.000	Analyzed:	12/28/12
Batch#:	194173		

Field ID	Type	Lab ID	Result	RL
SW-1	SAMPLE	242107-001	6,800	50
SW-2	SAMPLE	242107-002	8,100	50
SW-3	SAMPLE	242107-003	1,100	50
SW-4	SAMPLE	242107-004	870	50
SW-5	SAMPLE	242107-005	310	50
SW-6	SAMPLE	242107-006	540	50
SW-7	SAMPLE	242107-007	520	50
S PARR SW-11	SAMPLE	242107-008	970	50
N PARR SW-12	SAMPLE	242107-009	1,100	50
	BLANK	QC671431	ND	50

ND= Not Detected  
RL= Reporting Limit

### Metals Analytical Report

Lab #:	242107	Location:	Levin Richmond Terminal
Client:	Environmental Tech. Services	Prep:	EPA 200.8
Project#:	STANDARD	Analysis:	EPA 200.8
Analyte:	Lead	Sampled:	12/21/12
Matrix:	Water	Received:	12/21/12
Units:	ug/L	Prepared:	12/28/12
Diln Fac:	5.000	Analyzed:	12/28/12
Batch#:	194173		

Field ID	Type	Lab ID	Result	RL
SW-1	SAMPLE	242107-001	410	1.0
SW-2	SAMPLE	242107-002	410	1.0
SW-3	SAMPLE	242107-003	13	1.0
SW-4	SAMPLE	242107-004	13	1.0
SW-5	SAMPLE	242107-005	5.9	1.0
SW-6	SAMPLE	242107-006	4.4	1.0
SW-7	SAMPLE	242107-007	3.5	1.0
S PARR SW-11	SAMPLE	242107-008	11	1.0
N PARR SW-12	SAMPLE	242107-009	38	1.0
	BLANK	QC671431	ND	1.0

ND= Not Detected  
RL= Reporting Limit

### Metals Analytical Report

Lab #:	242107	Location:	Levin Richmond Terminal
Client:	Environmental Tech. Services	Prep:	EPA 200.8
Project#:	STANDARD	Analysis:	EPA 200.8
Analyte:	Vanadium	Sampled:	12/21/12
Matrix:	Water	Received:	12/21/12
Units:	ug/L	Prepared:	12/28/12
Diln Fac:	5.000	Analyzed:	12/28/12
Batch#:	194173		

Field ID	Type	Lab ID	Result	RL
SW-1	SAMPLE	242107-001	18	1.0
SW-2	SAMPLE	242107-002	22	1.0
SW-3	SAMPLE	242107-003	20	1.0
SW-4	SAMPLE	242107-004	560	1.0
SW-5	SAMPLE	242107-005	6.0	1.0
SW-6	SAMPLE	242107-006	4.0	1.0
SW-7	SAMPLE	242107-007	3.5	1.0
S PARR SW-11	SAMPLE	242107-008	77	1.0
N PARR SW-12	SAMPLE	242107-009	13	1.0
	BLANK	QC671431	ND	1.0

ND= Not Detected  
RL= Reporting Limit

### Metals Analytical Report

Lab #:	242107	Location:	Levin Richmond Terminal
Client:	Environmental Tech. Services	Prep:	EPA 200.8
Project#:	STANDARD	Analysis:	EPA 200.8
Analyte:	Zinc	Sampled:	12/21/12
Matrix:	Water	Received:	12/21/12
Units:	ug/L	Prepared:	12/28/12
Batch#:	194173	Analyzed:	12/28/12

Field ID	Type	Lab ID	Result	RL	Diln Fac
SW-1	SAMPLE	242107-001	2,400	200	50.00
SW-2	SAMPLE	242107-002	2,700	200	50.00
SW-3	SAMPLE	242107-003	140	20	5.000
SW-4	SAMPLE	242107-004	100	20	5.000
SW-5	SAMPLE	242107-005	54	20	5.000
SW-6	SAMPLE	242107-006	58	20	5.000
SW-7	SAMPLE	242107-007	46	20	5.000
S PARR SW-11	SAMPLE	242107-008	87	20	5.000
N PARR SW-12	SAMPLE	242107-009	140	20	5.000
	BLANK	QC671431	ND	20	5.000

ND= Not Detected  
RL= Reporting Limit

## Batch QC Report

Metals Analytical Report			
Lab #:	242107	Location:	Levin Richmond Terminal
Client:	Environmental Tech. Services	Prep:	EPA 200.8
Project#:	STANDARD	Analysis:	EPA 200.8
Analyte:	Aluminum	Batch#:	194173
Field ID:	SW-7	Sampled:	12/21/12
MSS Lab ID:	242107-007	Received:	12/21/12
Matrix:	Water	Prepared:	12/28/12
Units:	ug/L	Analyzed:	12/28/12
Diln Fac:	5.000		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC671432		10,000	9,740	97	58-134		
BSD	QC671433		10,000	9,745	97	58-134	0	23
MS	QC671434	211.4	10,000	10,860	106	58-130		
MSD	QC671435		10,000	10,640	104	58-130	2	20

RPD= Relative Percent Difference

## Batch QC Report

Metals Analytical Report			
Lab #:	242107	Location:	Levin Richmond Terminal
Client:	Environmental Tech. Services	Prep:	EPA 200.8
Project#:	STANDARD	Analysis:	EPA 200.8
Analyte:	Copper	Batch#:	194173
Field ID:	SW-7	Sampled:	12/21/12
MSS Lab ID:	242107-007	Received:	12/21/12
Matrix:	Water	Prepared:	12/28/12
Units:	ug/L	Analyzed:	12/28/12
Diln Fac:	5.000		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC671432		100.0	112.3	112	74-120		
BSD	QC671433		100.0	105.2	105	74-120	7	23
MS	QC671434	8.465	100.0	106.4	98	64-120		
MSD	QC671435		100.0	109.5	101	64-120	3	44

RPD= Relative Percent Difference



## Batch QC Report

Metals Analytical Report			
Lab #:	242107	Location:	Levin Richmond Terminal
Client:	Environmental Tech. Services	Prep:	EPA 200.8
Project#:	STANDARD	Analysis:	EPA 200.8
Analyte:	Iron	Batch#:	194173
Field ID:	SW-7	Sampled:	12/21/12
MSS Lab ID:	242107-007	Received:	12/21/12
Matrix:	Water	Prepared:	12/28/12
Units:	ug/L	Analyzed:	12/28/12
Diln Fac:	5.000		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC671432		10,000	11,250	112	55-145		
BSD	QC671433		10,000	10,870	109	55-145	3	35
MS	QC671434	517.5	10,000	10,650	101	50-138		
MSD	QC671435		10,000	10,620	101	50-138	0	34

RPD= Relative Percent Difference

## Batch QC Report

Metals Analytical Report			
Lab #:	242107	Location:	Levin Richmond Terminal
Client:	Environmental Tech. Services	Prep:	EPA 200.8
Project#:	STANDARD	Analysis:	EPA 200.8
Analyte:	Lead	Batch#:	194173
Field ID:	SW-7	Sampled:	12/21/12
MSS Lab ID:	242107-007	Received:	12/21/12
Matrix:	Water	Prepared:	12/28/12
Units:	ug/L	Analyzed:	12/28/12
Diln Fac:	5.000		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC671432		100.0	113.5	114	72-120		
BSD	QC671433		100.0	109.7	110	72-120	3	20
MS	QC671434	3.480	100.0	105.7	102	66-120		
MSD	QC671435		100.0	105.8	102	66-120	0	20

RPD= Relative Percent Difference

## Batch QC Report

Metals Analytical Report			
Lab #:	242107	Location:	Levin Richmond Terminal
Client:	Environmental Tech. Services	Prep:	EPA 200.8
Project#:	STANDARD	Analysis:	EPA 200.8
Analyte:	Vanadium	Batch#:	194173
Field ID:	SW-7	Sampled:	12/21/12
MSS Lab ID:	242107-007	Received:	12/21/12
Matrix:	Water	Prepared:	12/28/12
Units:	ug/L	Analyzed:	12/28/12
Diln Fac:	5.000		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC671432		100.0	110.2	110	73-120		
BSD	QC671433		100.0	101.9	102	73-120	8	20
MS	QC671434	3.478	100.0	102.2	99	67-120		
MSD	QC671435		100.0	101.8	98	67-120	0	41

RPD= Relative Percent Difference

## Batch QC Report

Metals Analytical Report			
Lab #:	242107	Location:	Levin Richmond Terminal
Client:	Environmental Tech. Services	Prep:	EPA 200.8
Project#:	STANDARD	Analysis:	EPA 200.8
Analyte:	Zinc	Batch#:	194173
Field ID:	SW-7	Sampled:	12/21/12
MSS Lab ID:	242107-007	Received:	12/21/12
Matrix:	Water	Prepared:	12/28/12
Units:	ug/L	Analyzed:	12/28/12
Diln Fac:	5.000		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC671432		100.0	103.2	103	70-123		
BSD	QC671433		100.0	102.5	102	70-123	1	36
MS	QC671434	46.26	100.0	139.1	93	58-123		
MSD	QC671435		100.0	135.6	89	58-123	3	44

RPD= Relative Percent Difference

Total Oil & Grease (HEM)			
Lab #:	242107	Location:	Levin Richmond Terminal
Client:	Environmental Tech. Services	Prep:	METHOD
Project#:	STANDARD	Analysis:	EPA 1664A
Analyte:	Oil & Grease (HEM)	Sampled:	12/21/12
Matrix:	Water	Received:	12/21/12
Units:	mg/L	Prepared:	12/26/12
Batch#:	194168	Analyzed:	12/27/12

Field ID	Type	Lab ID	Result	RL	Diln Fac
SW-1	SAMPLE	242107-001	38.8	4.70	0.9400
SW-2	SAMPLE	242107-002	15.1	4.70	0.9400
SW-3	SAMPLE	242107-003	ND	4.70	0.9400
SW-4	SAMPLE	242107-004	ND	4.70	0.9400
SW-5	SAMPLE	242107-005	ND	4.70	0.9400
SW-6	SAMPLE	242107-006	ND	4.70	0.9400
SW-7	SAMPLE	242107-007	ND	4.70	0.9400
S PARR SW-11	SAMPLE	242107-008	ND	4.70	0.9400
N PARR SW-12	SAMPLE	242107-009	ND	4.70	0.9400
	BLANK	QC671417	ND	5.00	1.000

ND= Not Detected  
 RL= Reporting Limit

## Batch QC Report

Total Oil & Grease (HEM)			
Lab #:	242107	Location:	Levin Richmond Terminal
Client:	Environmental Tech. Services	Prep:	METHOD
Project#:	STANDARD	Analysis:	EPA 1664A
Analyte:	Oil & Grease (HEM)	Batch#:	194168
Matrix:	Water	Prepared:	12/26/12
Units:	mg/L	Analyzed:	12/27/12
Diln Fac:	1.000		

Type	Lab ID	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC671418	40.00	34.90	87	78-114		
BSD	QC671419	40.00	32.40	81	78-114	7	18

RPD= Relative Percent Difference

Chemical Oxygen Demand			
Lab #:	242107	Location:	Levin Richmond Terminal
Client:	Environmental Tech. Services	Prep:	METHOD
Project#:	STANDARD	Analysis:	SM5220D
Analyte:	Chemical Oxygen Demand	Batch#:	194130
Matrix:	Water	Received:	12/21/12
Units:	mg/L	Prepared:	12/26/12 11:30
Diln Fac:	1.000	Analyzed:	12/26/12 13:50

Field ID	Type	Lab ID	Result	RL	Sampled
SW-1	SAMPLE	242107-001	79	10	12/21/12 12:15
SW-2	SAMPLE	242107-002	150	10	12/21/12
SW-3	SAMPLE	242107-003	41	10	12/21/12 15:45
SW-4	SAMPLE	242107-004	56	10	12/21/12 13:50
SW-5	SAMPLE	242107-005	18	10	12/21/12
SW-6	SAMPLE	242107-006	12	10	12/21/12
SW-7	SAMPLE	242107-007	50	10	12/21/12 14:16
S PARR SW-11	SAMPLE	242107-008	45	10	12/21/12 12:41
N PARR SW-12	SAMPLE	242107-009	28	10	12/21/12 13:21
	BLANK	QC671265	ND	10	

ND= Not Detected  
 RL= Reporting Limit

## Batch QC Report

Chemical Oxygen Demand			
Lab #:	242107	Location:	Levin Richmond Terminal
Client:	Environmental Tech. Services	Prep:	METHOD
Project#:	STANDARD	Analysis:	SM5220D
Analyte:	Chemical Oxygen Demand	Batch#:	194130
Field ID:	ZZZZZZZZZZ	Sampled:	12/18/12 09:25
MSS Lab ID:	242027-001	Received:	12/18/12
Matrix:	Water	Prepared:	12/26/12 11:30
Units:	mg/L	Analyzed:	12/26/12 13:50

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln	Fac
LCS	QC671266		75.00	73.97	99	90-110			1.000	
MS	QC671267	26.32	300.0	326.9	100	58-130			2.000	
MSD	QC671268		300.0	311.4	95	58-130	5	20	2.000	

RPD= Relative Percent Difference



Conductivity			
Lab #:	242107	Location:	Levin Richmond Terminal
Client:	Environmental Tech. Services	Prep:	METHOD
Project#:	STANDARD	Analysis:	SM2510B
Analyte:	Specific Conductance	Batch#:	194154
Matrix:	Water	Received:	12/21/12
Units:	umhos/cm	Analyzed:	12/27/12 00:00
Diln Fac:	1.000		

Field ID	Lab ID	Result	RL	Sampled
SW-1	242107-001	160	1.0	12/21/12 12:15
SW-2	242107-002	270	1.0	12/21/12
SW-3	242107-003	1,940	1.0	12/21/12 15:45
SW-4	242107-004	1,320	1.0	12/21/12 13:50
SW-5	242107-005	110	1.0	12/21/12
SW-6	242107-006	460	1.0	12/21/12
SW-7	242107-007	4,650	1.0	12/21/12 14:16
S PARR SW-11	242107-008	590	1.0	12/21/12 12:41
N PARR SW-12	242107-009	97	1.0	12/21/12 13:21

RL= Reporting Limit

## Batch QC Report

Conductivity			
Lab #:	242107	Location:	Levin Richmond Terminal
Client:	Environmental Tech. Services	Prep:	METHOD
Project#:	STANDARD	Analysis:	SM2510B
Analyte:	Specific Conductance	Diln Fac:	1.000
Field ID:	SW-1	Batch#:	194154
MSS Lab ID:	242107-001	Sampled:	12/21/12 12:15
Matrix:	Water	Received:	12/21/12
Units:	umhos/cm	Analyzed:	12/27/12 00:00

Type	Lab ID	MSS Result	Spiked	Result	RL	%REC	Limits	RPD	Lim
SDUP	QC671367	159.2		160.4	1.000			1	20
LCS	QC671374		1,412	1,002		100	90-110		

RL= Reporting Limit

RPD= Relative Percent Difference

pH			
Lab #:	242107	Location:	Levin Richmond Terminal
Client:	Environmental Tech. Services	Prep:	METHOD
Project#:	STANDARD	Analysis:	SM4500H+B
Analyte:	pH	Batch#:	194101
Matrix:	Water	Received:	12/21/12
Units:	SU	Analyzed:	12/21/12 18:08
Diln Fac:	1.000		

Field ID	Lab ID	Result	RL	Sampled
SW-1	242107-001	7.2	1.0	12/21/12 12:15
SW-2	242107-002	8.1	1.0	12/21/12
SW-3	242107-003	7.3	1.0	12/21/12 15:45
SW-4	242107-004	7.1	1.0	12/21/12 13:50
SW-5	242107-005	6.5	1.0	12/21/12
SW-6	242107-006	6.6	1.0	12/21/12
SW-7	242107-007	7.4	1.0	12/21/12 14:16
S PARR SW-11	242107-008	7.7	1.0	12/21/12 12:41
N PARR SW-12	242107-009	6.8	1.0	12/21/12 13:21

RL= Reporting Limit

## Batch QC Report

pH				
Lab #:	242107	Location:	Levin Richmond Terminal	
Client:	Environmental Tech. Services	Prep:	METHOD	
Project#:	STANDARD	Analysis:	SM4500H+B	
Analyte:	pH	Units:	SU	
Field ID:	ZZZZZZZZZZ	Diln Fac:	1.000	
Type:	SDUP	Batch#:	194101	
MSS Lab ID:	242102-002	Sampled:	12/20/12 13:50	
Lab ID:	QC671172	Received:	12/21/12	
Matrix:	Water	Analyzed:	12/21/12 16:00	

MSS Result	Result	RL	RPD	Lim
7.010	6.960	1.000	1	20

Total Organic Carbon (TOC)			
Lab #:	242107	Location:	Levin Richmond Terminal
Client:	Environmental Tech. Services	Prep:	METHOD
Project#:	STANDARD	Analysis:	SM5310C
Analyte:	Total Organic Carbon	Batch#:	194152
Matrix:	Water	Sampled:	12/21/12
Units:	mg/L	Received:	12/21/12
Diln Fac:	1.000	Analyzed:	12/27/12

Field ID	Type	Lab ID	Result	RL
SW-1	SAMPLE	242107-001	5.9	0.50
SW-2	SAMPLE	242107-002	8.1	0.50
SW-3	SAMPLE	242107-003	3.1	0.50
SW-4	SAMPLE	242107-004	5.9	0.50
SW-5	SAMPLE	242107-005	2.6	0.50
SW-6	SAMPLE	242107-006	2.2	0.50
SW-7	SAMPLE	242107-007	3.6	0.50
S PARR SW-11	SAMPLE	242107-008	2.4	0.50
N PARR SW-12	SAMPLE	242107-009	2.7	0.50
	BLANK	QC671358	ND	0.50

ND= Not Detected  
RL= Reporting Limit

## Batch QC Report

Total Organic Carbon (TOC)			
Lab #:	242107	Location:	Levin Richmond Terminal
Client:	Environmental Tech. Services	Prep:	METHOD
Project#:	STANDARD	Analysis:	SM5310C
Analyte:	Total Organic Carbon	Diln Fac:	1.000
Field ID:	SW-1	Batch#:	194152
MSS Lab ID:	242107-001	Sampled:	12/21/12
Matrix:	Water	Received:	12/21/12
Units:	mg/L	Analyzed:	12/27/12

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
LCS	QC671359		10.00	10.03	100	90-110		
MS	QC671360	5.878	2.000	8.180	115	50-126		
MSD	QC671361		2.000	8.631	138 *	50-126	5	20

\*= Value outside of QC limits; see narrative

RPD= Relative Percent Difference

Total Suspended Solids (TSS)			
Lab #:	242107	Location:	Levin Richmond Terminal
Client:	Environmental Tech. Services	Prep:	METHOD
Project#:	STANDARD	Analysis:	EPA 160.2
Analyte:	Total Suspended Solids	Sampled:	12/21/12
Matrix:	Water	Received:	12/21/12
Units:	mg/L	Prepared:	12/27/12
Diln Fac:	1.000	Analyzed:	12/28/12
Batch#:	194153		

Field ID	Type	Lab ID	Result	RL
SW-1	SAMPLE	242107-001	140	5
SW-2	SAMPLE	242107-002	440	5
SW-3	SAMPLE	242107-003	110	5
SW-4	SAMPLE	242107-004	30	5
SW-5	SAMPLE	242107-005	11	5
SW-6	SAMPLE	242107-006	9	5
SW-7	SAMPLE	242107-007	9	5
S PARR SW-11	SAMPLE	242107-008	210	5
N PARR SW-12	SAMPLE	242107-009	15	5
	BLANK	QC671362	ND	5

ND= Not Detected  
RL= Reporting Limit

## Batch QC Report

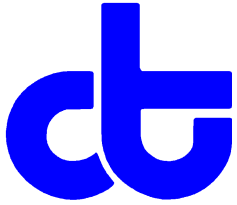
Total Suspended Solids (TSS)			
Lab #:	242107	Location:	Levin Richmond Terminal
Client:	Environmental Tech. Services	Prep:	METHOD
Project#:	STANDARD	Analysis:	EPA 160.2
Analyte:	Total Suspended Solids	Batch#:	194153
Field ID:	SW-6	Sampled:	12/21/12
MSS Lab ID:	242107-006	Received:	12/21/12
Matrix:	Water	Prepared:	12/27/12
Units:	mg/L	Analyzed:	12/28/12
Diln Fac:	1.000		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC671363		50.00	50.00	100	80-120		
BSD	QC671364		50.00	47.00	94	80-120	6 *	5
MS	QC671365	9.000	50.00	57.00	96	63-138		
MSD	QC671366		50.00	57.00	96	63-138	0	5

\*= Value outside of QC limits; see narrative

RPD= Relative Percent Difference





Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

**Laboratory Job Number 242108**  
**ANALYTICAL REPORT**

Environmental Tech. Services	Project : STANDARD
1548 Jacob Avenue	Location : Levin Richmond Terminal Discharge
San Jose, CA 95118	Level : II

<u>Sample ID</u>	<u>Lab ID</u>
SW-1	242108-001
SW-2	242108-002
SW-3	242108-003
SW-4	242108-004
SW-5	242108-005
SW-6	242108-006
SW-7	242108-007
S PARR SW-11	242108-008
N PARR SW-12	242108-009
LEVIN SW1-7 COMPOSITE	242108-010

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAP and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: \_\_\_\_\_

Tracy Babjar  
Project Manager  
(510) 204-2226

Date: 01/04/2013

NELAP # 01107CA

## CASE NARRATIVE

Laboratory number: 242108  
Client: Environmental Tech. Services  
Location: Levin Richmond Terminal Discharge  
Request Date: 12/21/12  
Samples Received: 12/21/12

This data package contains sample and QC results for two water samples and one seven-point water composite, requested for the above referenced project on 12/21/12. The samples were received cold and intact.

**Volatile Organics by GC/MS (EPA 624):**

No analytical problems were encountered.

**Metals (EPA 200.8):**

No analytical problems were encountered.

**Total Oil & Grease (HEM) (EPA 1664A):**

No analytical problems were encountered.

**pH (SM4500H+B):**

Samples received and analyzed past hold. No other analytical problems were encountered.

Analyze using CFR-136

40

242108

Discharge

CHAIN OF CUSTODY/ANALYSES REQUESTED		LPT STORMWATER SAMPLES	
Environmental Technical Services		PO. NO. (required) TL Levin Rich term no	
1548 Jacob Avenue		Project Name: LRT ANNUAL TEST 11211	
San Jose, California 95118		122112-LEXN SW1-SW7	

CLIENT ID	CHK BY SYSTEMS TO BE ANALYZED	DATE	TIME	LAB ID NO	PH	SPEC COND	TOG 1664	COD	NI 2000.8 TTLC	TEPH MO
SW-1	Composite	12/21/12			5.4500 H <sub>2</sub> O		X		X	
SW-2										
SW-3										
SW-4										
SW-5										
SW-6										
SW-7		12/21/12	2:40							
S PARR SW-10										
S PARR SW-11			12:59							
N PARR SW-12			1:46							

Released To:	Print: Y. P. AHLQUIST	Time: 1745
Sign: [Signature]	Date: 12/21/12	
Released By:	Print: [Signature]	Time: 1745
Sign: [Signature]	Date: 12/21/12	

Released To:	Print: [Signature]	Time: [Time]
Sign: [Signature]	Date: [Date]	
Released By:	Print: [Signature]	Time: [Time]
Sign: [Signature]	Date: [Date]	

Notes: Please analyze all Systems checked for all analyses listed. NS=Not Sampled (system wasn't discharging) *Copy, Nicked Lead Zinc*

## COOLER RECEIPT CHECKLIST



Curtis &amp; Tompkins, Ltd.

Login # 242108 Date Received 12/21/12 Number of coolers 5  
 Client ENTS Project Levin Richmond Terminal  
 Date Opened 12/21/12 By (print) JA 1 (sign) [Signature]  
 Date Logged in ↓ By (print) ↓ (sign) [Signature]

1. Did cooler come with a shipping slip (airbill, etc) \_\_\_\_\_ YES (NO)  
 Shipping info \_\_\_\_\_

2A. Were custody seals present? .... ☐ YES (circle) on cooler on samples ☒ NO  
 How many \_\_\_\_\_ Name \_\_\_\_\_ Date \_\_\_\_\_

2B. Were custody seals intact upon arrival? \_\_\_\_\_ YES NO (N/A)

3. Were custody papers dry and intact when received? (YES) YES NO

4. Were custody papers filled out properly (ink, signed, etc)? (YES) YES NO

5. Is the project identifiable from custody papers? (If so fill out top of form) (YES) YES NO

6. Indicate the packing in cooler: (if other, describe) \_\_\_\_\_

☒ Bubble Wrap ☐ Foam blocks ☒ Bags ☐ None  
☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation: \* Notify PM if temperature exceeds 6°C

Type of ice used: ☒ Wet ☐ Blue/Gel ☐ None Temp(°C) \_\_\_\_\_

☒ Samples Received on ice & cold without a temperature blank; temp. taken with IR gun

☐ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? \_\_\_\_\_ YES (NO)

If YES, what time were they transferred to freezer? \_\_\_\_\_

9. Did all bottles arrive unbroken/unopened? (YES) YES NO

10. Are there any missing / extra samples? (YES) YES NO

11. Are samples in the appropriate containers for indicated tests? (YES) YES NO

12. Are sample labels present, in good condition and complete? (YES) YES NO MI.

13. Do the sample labels agree with custody papers? (YES) YES NO

14. Was sufficient amount of sample sent for tests requested? (YES) YES NO

15. Are the samples appropriately preserved? (YES) YES NO N/A

16. Did you check preservatives for all bottles for each sample? (YES) YES NO N/A

17. Did you document your preservative check? (YES) YES NO N/A

18. Did you change the hold time in LIMS for unpreserved VOAs? (YES) YES NO (N/A)

19. Did you change the hold time in LIMS for preserved terracores? (YES) YES NO (N/A)

20. Are bubbles > 6mm absent in VOA samples? (YES) YES NO N/A

21. Was the client contacted concerning this sample delivery? \_\_\_\_\_ YES (NO)

If YES, Who was called? \_\_\_\_\_ By \_\_\_\_\_ Date: \_\_\_\_\_

## COMMENTS

10. Sample - 003 Missing 3 VOAs  
12. Some sample labels state time, some don't,  
CDC doesn't state time.

Curtis & Tompkins Sample Preservation for 242108

Sample	pH: <2	>9	>12	Other
-010a	[ ]	[ ]	[ ]	_____
b	[ ]	[ ]	[ ]	_____
c	[ ]	[ ]	[ ]	_____
d	[ ]	[ ]	[ ]	_____
e	[ ]	[ ]	[ ]	_____

Analyst:             
 Date:

### Curtis & Tompkins Laboratories Analytical Report

Lab #:	242108	Location:	Levin Richmond Terminal Discharge
Client:	Environmental Tech. Services	Prep:	EPA 624
Project#:	STANDARD	Analysis:	EPA 624
Matrix:	Water	Sampled:	12/21/12
Units:	ug/L	Received:	12/21/12
Diln Fac:	1.000	Analyzed:	12/28/12
Batch#:	194189		

Field ID: S PARR SW-11  
Type: SAMPLE

Lab ID: 242108-008

Analyte	Result	RL
Benzene	ND	0.5
Toluene	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	109	80-127
1,2-Dichloroethane-d4	108	69-148
Toluene-d8	101	80-120
Bromofluorobenzene	104	80-121

Field ID: N PARR SW-12  
Type: SAMPLE

Lab ID: 242108-009

Analyte	Result	RL
Benzene	ND	0.5
Toluene	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	109	80-127
1,2-Dichloroethane-d4	108	69-148
Toluene-d8	102	80-120
Bromofluorobenzene	104	80-121

ND= Not Detected  
RL= Reporting Limit

### Curtis & Tompkins Laboratories Analytical Report

Lab #:	242108	Location:	Levin Richmond Terminal Discharge
Client:	Environmental Tech. Services	Prep:	EPA 624
Project#:	STANDARD	Analysis:	EPA 624
Matrix:	Water	Sampled:	12/21/12
Units:	ug/L	Received:	12/21/12
Diln Fac:	1.000	Analyzed:	12/28/12
Batch#:	194189		

Field ID: LEVIN SW1-7 COMPOSITE      Lab ID: 242108-010  
Type: SAMPLE

Analyte	Result	RL
Benzene	ND	0.5
Toluene	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	109	80-127
1,2-Dichloroethane-d4	110	69-148
Toluene-d8	101	80-120
Bromofluorobenzene	103	80-121

Type: BLANK      Lab ID: QC671495

Analyte	Result	RL
Benzene	ND	0.5
Toluene	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	106	80-127
1,2-Dichloroethane-d4	105	69-148
Toluene-d8	101	80-120
Bromofluorobenzene	103	80-121

ND= Not Detected  
RL= Reporting Limit

## Batch QC Report

Curtis & Tompkins Laboratories Analytical Report				
Lab #:	242108	Location:	Levin Richmond Terminal Discharge	
Client:	Environmental Tech. Services	Prep:	EPA 624	
Project#:	STANDARD	Analysis:	EPA 624	
Matrix:	Water	Batch#:	194189	
Units:	ug/L	Analyzed:	12/28/12	
Diln Fac:	1.000			

Type: BS Lab ID: QC671493

Analyte	Spiked	Result	%REC	Limits
Benzene	12.50	14.69	117	80-123
Toluene	12.50	13.99	112	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	105	80-127
1,2-Dichloroethane-d4	104	69-148
Toluene-d8	101	80-120
Bromofluorobenzene	100	80-121

Type: BSD Lab ID: QC671494

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Benzene	12.50	14.52	116	80-123	1	20
Toluene	12.50	13.96	112	80-120	0	20

Surrogate	%REC	Limits
Dibromofluoromethane	104	80-127
1,2-Dichloroethane-d4	104	69-148
Toluene-d8	101	80-120
Bromofluorobenzene	99	80-121

RPD= Relative Percent Difference



### Metals Analytical Report

Lab #:	242108	Location:	Levin Richmond Terminal Discharge
Client:	Environmental Tech. Services	Prep:	EPA 200.8
Project#:	STANDARD	Analysis:	EPA 200.8
Field ID:	LEVIN SW1-7 COMPOSITE	Sampled:	12/21/12
Matrix:	Water	Received:	12/21/12
Units:	ug/L	Prepared:	12/27/12
Diln Fac:	5.000	Analyzed:	12/27/12
Batch#:	194144		

Type: SAMPLE Lab ID: 242108-010

Analyte	Result	RL
Copper	31	2.3
Lead	64	1.0
Nickel	32	1.0
Zinc	360	20

Type: BLANK Lab ID: QC671320

Analyte	Result	RL
Copper	ND	2.3
Lead	ND	1.0
Nickel	ND	1.0
Zinc	ND	20

ND= Not Detected  
RL= Reporting Limit

## Batch QC Report

Metals Analytical Report					
Lab #:	242108	Location:	Levin Richmond Terminal Discharge		
Client:	Environmental Tech. Services	Prep:	EPA 200.8		
Project#:	STANDARD	Analysis:	EPA 200.8		
Matrix:	Water	Batch#:	194144		
Units:	ug/L	Prepared:	12/27/12		
Diln Fac:	5.000	Analyzed:	12/27/12		

Type: BS Lab ID: QC671321

Analyte	Spiked	Result	%REC	Limits
Copper	100.0	104.9	105	74-120
Lead	100.0	108.8	109	72-120
Nickel	100.0	96.20	96	61-131
Zinc	100.0	117.7	118	70-123

Type: BSD Lab ID: QC671322

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Copper	100.0	108.3	108	74-120	3	23
Lead	100.0	103.0	103	72-120	6	20
Nickel	100.0	99.70	100	61-131	4	23
Zinc	100.0	108.0	108	70-123	9	36

RPD= Relative Percent Difference

## Batch QC Report

Metals Analytical Report			
Lab #:	242108	Location:	Levin Richmond Terminal Discharge
Client:	Environmental Tech. Services	Prep:	EPA 200.8
Project#:	STANDARD	Analysis:	EPA 200.8
Field ID:	ZZZZZZZZZZ	Batch#:	194144
MSS Lab ID:	242073-006	Sampled:	12/18/12
Matrix:	Water	Received:	12/20/12
Units:	ug/L	Prepared:	12/27/12
Diln Fac:	5.000		

Type: MS Lab ID: QC671323

Analyte	MSS Result	Spiked	Result	%REC	Limits	Analyzed
Copper	<0.7631	100.0	94.90	95	64-120	12/28/12
Lead	<0.2907	100.0	99.40	99	66-120	12/27/12
Nickel	<0.1769	100.0	94.45	94	57-126	12/28/12
Zinc	9.910	100.0	96.95	87	58-123	01/02/13

Type: MSD Lab ID: QC671324

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	Analyzed
Copper	100.0	92.20	92	64-120	3	44	12/28/12
Lead	100.0	97.95	98	66-120	1	20	12/27/12
Nickel	100.0	93.65	94	57-126	1	42	12/28/12
Zinc	100.0	98.05	88	58-123	1	44	01/02/13

RPD= Relative Percent Difference

Total Oil & Grease (HEM)			
Lab #:	242108	Location: Levin Richmond Terminal Discharge	
Client:	Environmental Tech. Services	Prep:	METHOD
Project#:	STANDARD	Analysis: EPA 1664A	
Analyte:	Oil & Grease (HEM)	Sampled:	12/21/12
Field ID:	LEVIN SW1-7 COMPOSITE	Received:	12/21/12
Matrix:	Water	Prepared:	12/26/12
Units:	mg/L	Analyzed:	12/27/12
Batch#:	194168		

Type	Lab ID	Result	RL	Diln Fac
SAMPLE	242108-010	6.86	4.75	0.9500
BLANK	QC671417	ND	5.00	1.000

ND= Not Detected  
RL= Reporting Limit

## Batch QC Report

Total Oil & Grease (HEM)			
Lab #:	242108	Location:	Levin Richmond Terminal Discharge
Client:	Environmental Tech. Services	Prep:	METHOD
Project#:	STANDARD	Analysis:	EPA 1664A
Analyte:	Oil & Grease (HEM)	Batch#:	194168
Matrix:	Water	Prepared:	12/26/12
Units:	mg/L	Analyzed:	12/27/12
Diln Fac:	1.000		

Type	Lab ID	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC671418	40.00	34.90	87	78-114		
BSD	QC671419	40.00	32.40	81	78-114	7	18

RPD= Relative Percent Difference

pH			
Lab #:	242108	Location:	Levin Richmond Terminal Discharge
Client:	Environmental Tech. Services	Prep:	METHOD
Project#:	STANDARD	Analysis:	SM4500H+B
Analyte:	pH	Diln Fac:	1.000
Field ID:	LEVIN SW1-7 COMPOSITE	Batch#:	194137
Lab ID:	242108-010	Sampled:	12/21/12
Matrix:	Water	Received:	12/21/12
Units:	SU	Analyzed:	12/26/12 10:30

Result	RL
7.1 b	1.0

## Batch QC Report

pH				
Lab #:	242108	Location:	Levin Richmond Terminal Discharge	
Client:	Environmental Tech. Services	Prep:	METHOD	
Project#:	STANDARD	Analysis:	SM4500H+B	
Analyte:	pH	Units:	SU	
Field ID:	LEVIN SW1-7 COMPOSITE	Diln Fac:	1.000	
Type:	SDUP	Batch#:	194137	
MSS Lab ID:	242108-010	Sampled:	12/21/12	
Lab ID:	QC671294	Received:	12/21/12	
Matrix:	Water	Analyzed:	12/26/12 10:30	

MSS Result	Result	RL	RPD	Lim
7.100	7.070 b	1.000	NC	20

b= See narrative  
NC= Not Calculated  
RL= Reporting Limit  
RPD= Relative Percent Difference  
Page 1 of 1



Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

**Laboratory Job Number 243227**  
**ANALYTICAL REPORT**

San Francisco Baykeeper  
785 Market Street  
San Francisco, CA 94103

Project : STANDARD  
Location : Levin  
Level : II

Sample ID  
LEVIN 1

Lab ID  
243227-001

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: \_\_\_\_\_

Tracy Babjar  
Project Manager  
(510) 204-2226

Date: 02/26/2013

NELAP # 01107CA



## CASE NARRATIVE

Laboratory number: 243227  
Client: San Francisco Baykeeper  
Location: Levin  
Request Date: 02/19/13  
Samples Received: 02/19/13

This data package contains sample and QC results for one water sample, requested for the above referenced project on 02/19/13. The sample was received cold and intact.

**Volatile Organics by GC/MS (EPA 8260B):**

No analytical problems were encountered.

**Semivolatile Organics by GC/MS SIM (EPA 8270C-SIM):**

No analytical problems were encountered.

**Metals (EPA 6020 and EPA 7470A) Water:**

No analytical problems were encountered.

**Metals (EPA 6020 and EPA 7470A) Filtrate:**

No analytical problems were encountered.

**Hydrocarbon Oil & Grease (SGT-HEM) (EPA 1664A):**

Matrix spikes were not performed for this analysis due to insufficient sample volume. No analytical problems were encountered.

**Total Suspended Solids (TSS) (EPA 160.2):**

No analytical problems were encountered.

**ct** **Curtis & Tompkins Laboratories**  
**ENVIRONMENTAL ANALYTICAL TESTING LABORATORY**

**In Business Since 1878**

2323 Fifth Street  
Berkeley, CA 94710

**Project No:** ~~16-000~~

Project Name: Levin

**Project P. O. No:**

EDD Format: \_\_\_\_\_  
Report Level ☐ I ☐ II ☐ III ☐ IV  
Telephone: 415-856-1444 X 108

Turnaround Time: ☐ RUSH

Lab No.	Sample ID.	SAMPLING		MATRIX	# of Containers	CHEMICAL PRESERVATIVE
		Date Collected	Time Collected			
						HCl
						H2SO4
						HNO3
						NaOH
						None

1-1						X
1-2 (dissolved metals)	1/19/13	10:10	X			
1-3		1040	X			X
1-4 } core sample		1040	X			
1-5 }		1040	X		X	
1-6 }		1040	X		X	
1-7		1040	X		X	
1-8		1040	X			X
1-9 Z		1040	X			
1-10 MSD sample		1040	X		X	
1-11 ~		1040	X		X	

**Notes:**

## SAMPLE

RECEIPT

☐ Intact

☐ Cold

☒ On Ice

☐ Ambient

RELINQUISHED BY:

Van Wren  
DATE: 2/9/13 TIME: 1300

DATE: TIME:

DATE: TIME:

RECEIVED BY:

DATE: 2/19 TIME: 1300

DATE: TIME:

DATE: TIME:

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Chain of Custody #

C&T LOGIN # 29366 **ANALYTICAL REQUEST**

## ANALYTICAL REQUEST

[illegible]

# COOLER RECEIPT CHECKLIST



Curtis & Tompkins, Ltd.

Login # 243227 Date Received 2/19/13 Number of coolers 1  
 Client Bay keeper Project Levin  
 Date Opened 2/19/13 By (print) MA (sign) [Signature]  
 Date Logged in L By (print) L (sign) [Signature]

1. Did cooler come with a shipping slip (airbill, etc) \_\_\_\_\_ YES ☒ NO  
 Shipping info \_\_\_\_\_

2A. Were custody seals present? .... ☐ YES (circle) on cooler on samples ☒ NO  
 How many \_\_\_\_\_ Name \_\_\_\_\_ Date \_\_\_\_\_

2B. Were custody seals intact upon arrival? \_\_\_\_\_ YES NO N/A

3. Were custody papers dry and intact when received? YES NO

4. Were custody papers filled out properly (ink, signed, etc)? YES NO

5. Is the project identifiable from custody papers? (If so fill out top of form) YES NO

6. Indicate the packing in cooler: (if other, describe) \_\_\_\_\_

☐ Bubble Wrap ☐ Foam blocks ☒ Bags ☐ None  
☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation: \* Notify PM if temperature exceeds 6°C

Type of ice used: ☒ Wet ☐ Blue/Gel ☐ None Temp(°C) 1.8

☐ Samples Received on ice & cold without a temperature blank; temp. taken with IR gun

☐ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? \_\_\_\_\_ YES ☒ NO

If YES, what time were they transferred to freezer? \_\_\_\_\_

9. Did all bottles arrive unbroken/unopened? YES NO

10. Are there any missing / extra samples? YES NO

11. Are samples in the appropriate containers for indicated tests? YES NO

12. Are sample labels present, in good condition and complete? YES NO

13. Do the sample labels agree with custody papers? YES NO

14. Was sufficient amount of sample sent for tests requested? YES NO

15. Are the samples appropriately preserved? YES NO N/A

16. Did you check preservatives for all bottles for each sample? YES NO N/A

17. Did you document your preservative check? YES NO N/A

18. Did you change the hold time in LIMS for unpreserved VOAs? YES NO N/A

19. Did you change the hold time in LIMS for preserved terracores? YES NO N/A

20. Are bubbles > 6mm absent in VOA samples? YES NO N/A

21. Was the client contacted concerning this sample delivery? \_\_\_\_\_ YES ☒ NO

If YES, Who was called? \_\_\_\_\_ By \_\_\_\_\_ Date: \_\_\_\_\_

## COMMENTS

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Rev 10, 11/11

SFBK-012502

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Curtis & Tompkins Sample Preservation for 243227

Sample	pH: <2	>9	>12	Other
-001a	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
j	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
k	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Analyst: AA

Date: 2/19/13

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### Purgeable Organics by GC/MS

Lab #:	243227	Location:	Levin
Client:	San Francisco Baykeeper	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Field ID:	LEVIN 1	Batch#:	195698
Lab ID:	243227-001	Sampled:	02/19/13
Matrix:	Water	Received:	02/19/13
Units:	ug/L	Analyzed:	02/20/13
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50
tert-Butyl Alcohol (TBA)	ND	10
Isopropyl Ether (DIPE)	ND	0.50
Ethyl tert-Butyl Ether (ETBE)	ND	0.50
Methyl tert-Amyl Ether (TAME)	ND	0.50
MTBE	ND	0.50
1,2-Dichloroethane	ND	0.50
Benzene	ND	0.50
Toluene	ND	0.50
1,2-Dibromoethane	ND	0.50
Ethylbenzene	ND	0.50
m,p-Xylenes	ND	0.50
o-Xylene	ND	0.50

Surrogate	%REC	Limits
Dibromofluoromethane	100	77-134
1,2-Dichloroethane-d4	97	72-140
Toluene-d8	97	80-120
Bromofluorobenzene	99	80-120

ND= Not Detected  
RL= Reporting Limit

## Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	243227	Location:	Levin
Client:	San Francisco Baykeeper	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	195698
Units:	ug/L	Analyzed:	02/20/13
Diln Fac:	1.000		

Type: BS Lab ID: QC677411

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	75.00	73.90	99	37-144
Isopropyl Ether (DIPE)	15.00	14.32	95	52-123
Ethyl tert-Butyl Ether (ETBE)	15.00	14.72	98	57-120
Methyl tert-Amyl Ether (TAME)	15.00	15.21	101	59-120
MTBE	15.00	14.67	98	58-120
1,2-Dichloroethane	15.00	15.63	104	73-136
Benzene	15.00	15.34	102	78-125
Toluene	15.00	15.81	105	79-123
1,2-Dibromoethane	15.00	15.68	105	78-120
Ethylbenzene	15.00	15.47	103	80-126
m,p-Xylenes	30.00	30.75	102	80-123
o-Xylene	15.00	15.25	102	75-120

Surrogate	%REC	Limits
Dibromofluoromethane	99	77-134
1,2-Dichloroethane-d4	98	72-140
Toluene-d8	103	80-120
Bromofluorobenzene	93	80-120

Type: BSD Lab ID: QC677412

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	75.00	77.83	104	37-144	5	31
Isopropyl Ether (DIPE)	15.00	15.73	105	52-123	9	20
Ethyl tert-Butyl Ether (ETBE)	15.00	15.32	102	57-120	4	23
Methyl tert-Amyl Ether (TAME)	15.00	15.45	103	59-120	2	22
MTBE	15.00	15.98	107	58-120	9	23
1,2-Dichloroethane	15.00	16.48	110	73-136	5	20
Benzene	15.00	16.38	109	78-125	7	20
Toluene	15.00	16.39	109	79-123	4	20
1,2-Dibromoethane	15.00	15.85	106	78-120	1	20
Ethylbenzene	15.00	16.39	109	80-126	6	20
m,p-Xylenes	30.00	30.99	103	80-123	1	20
o-Xylene	15.00	15.65	104	75-120	3	20

Surrogate	%REC	Limits
Dibromofluoromethane	95	77-134
1,2-Dichloroethane-d4	96	72-140
Toluene-d8	96	80-120
Bromofluorobenzene	98	80-120

RPD= Relative Percent Difference

## Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	243227	Location:	Levin
Client:	San Francisco Baykeeper	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC677413	Batch#:	195698
Matrix:	Water	Analyzed:	02/20/13
Units:	ug/L		

Analyte	Result	RL
Gasoline C7-C12	ND	50
tert-Butyl Alcohol (TBA)	ND	10
Isopropyl Ether (DIPE)	ND	0.50
Ethyl tert-Butyl Ether (ETBE)	ND	0.50
Methyl tert-Amyl Ether (TAME)	ND	0.50
MTBE	ND	0.50
1,2-Dichloroethane	ND	0.50
Benzene	ND	0.50
Toluene	ND	0.50
1,2-Dibromoethane	ND	0.50
Ethylbenzene	ND	0.50
m,p-Xylenes	ND	0.50
o-Xylene	ND	0.50

Surrogate	%REC	Limits
Dibromofluoromethane	97	77-134
1,2-Dichloroethane-d4	104	72-140
Toluene-d8	101	80-120
Bromofluorobenzene	95	80-120

ND= Not Detected

RL= Reporting Limit

## Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	243227	Location:	Levin
Client:	San Francisco Baykeeper	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	195698
Units:	ug/L	Analyzed:	02/20/13
Diln Fac:	1.000		

Type: BS Lab ID: QC677430

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,000	955.6	96	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	97	77-134
1,2-Dichloroethane-d4	99	72-140
Toluene-d8	104	80-120
Bromofluorobenzene	96	80-120

Type: BSD Lab ID: QC677431

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	1,000	873.7	87	80-120	9	20

Surrogate	%REC	Limits
Dibromofluoromethane	100	77-134
1,2-Dichloroethane-d4	98	72-140
Toluene-d8	96	80-120
Bromofluorobenzene	99	80-120

RPD= Relative Percent Difference



## Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	243227	Location:	Levin
Client:	San Francisco Baykeeper	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Field ID:	LEVIN 1	Batch#:	195698
MSS Lab ID:	243227-001	Sampled:	02/19/13
Matrix:	Water	Received:	02/19/13
Units:	ug/L	Analyzed:	02/20/13
Diln Fac:	1.000		

Type: MS Lab ID: QC677459

Analyte	MSS Result	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	<1.343	125.0	125.4	100	42-140
Isopropyl Ether (DIPE)	<0.1000	25.00	26.19	105	59-120
Ethyl tert-Butyl Ether (ETBE)	<0.1000	25.00	26.27	105	62-120
Methyl tert-Amyl Ether (TAME)	<0.1000	25.00	28.16	113	63-120
MTBE	<0.1000	25.00	25.92	104	63-120
1,2-Dichloroethane	<0.1000	25.00	27.72	111	80-133
Benzene	<0.1000	25.00	29.09	116	80-125
Toluene	<0.1000	25.00	26.49	106	80-122
1,2-Dibromoethane	<0.1000	25.00	26.46	106	80-120
Ethylbenzene	<0.1022	25.00	26.71	107	80-124
m,p-Xylenes	<0.1357	50.00	53.42	107	80-121
o-Xylene	<0.1322	25.00	25.50	102	77-120

Surrogate	%REC	Limits
Dibromofluoromethane	100	77-134
1,2-Dichloroethane-d4	102	72-140
Toluene-d8	96	80-120
Bromofluorobenzene	100	80-120

Type: MSD Lab ID: QC677460

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	125.0	146.7	117	42-140	16	39
Isopropyl Ether (DIPE)	25.00	26.61	106	59-120	2	25
Ethyl tert-Butyl Ether (ETBE)	25.00	27.86	111	62-120	6	27
Methyl tert-Amyl Ether (TAME)	25.00	26.52	106	63-120	6	27
MTBE	25.00	26.52	106	63-120	2	27
1,2-Dichloroethane	25.00	26.01	104	80-133	6	21
Benzene	25.00	26.30	105	80-125	10	21
Toluene	25.00	26.82	107	80-122	1	21
1,2-Dibromoethane	25.00	26.68	107	80-120	1	22
Ethylbenzene	25.00	26.31	105	80-124	2	21
m,p-Xylenes	50.00	51.90	104	80-121	3	21
o-Xylene	25.00	25.40	102	77-120	0	22

Surrogate	%REC	Limits
Dibromofluoromethane	101	77-134
1,2-Dichloroethane-d4	95	72-140
Toluene-d8	97	80-120
Bromofluorobenzene	96	80-120

RPD= Relative Percent Difference

### Semivolatile Organics by GC/MS SIM

Lab #:	243227	Location:	Levin
Client:	San Francisco Baykeeper	Prep:	EPA 3520C
Project#:	STANDARD	Analysis:	EPA 8270C-SIM
Field ID:	LEVIN 1	Batch#:	195713
Lab ID:	243227-001	Sampled:	02/19/13
Matrix:	Water	Received:	02/19/13
Units:	ug/L	Prepared:	02/20/13
Diln Fac:	1.000	Analyzed:	02/21/13

Analyte	Result	RL
Naphthalene	0.3	0.09
Acenaphthylene	ND	0.09
Acenaphthene	ND	0.09
Fluorene	0.1	0.09
Phenanthrene	1.1	0.09
Anthracene	0.4	0.09
Fluoranthene	0.4	0.09
Pyrene	1.4	0.09
Benzo(a)anthracene	1.9	0.09
Chrysene	3.7	0.09
Benzo(b)fluoranthene	1.2	0.09
Benzo(k)fluoranthene	0.2	0.09
Benzo(a)pyrene	2.5	0.09
Indeno(1,2,3-cd)pyrene	0.6	0.09
Dibenz(a,h)anthracene	1.2	0.09
Benzo(g,h,i)perylene	2.0	0.09

Surrogate	%REC	Limits
Nitrobenzene-d5	82	48-130
2-Fluorobiphenyl	76	47-120
Terphenyl-d14	61	33-120

ND= Not Detected  
RL= Reporting Limit

## Batch QC Report

Semivolatile Organics by GC/MS SIM			
Lab #:	243227	Location:	Levin
Client:	San Francisco Baykeeper	Prep:	EPA 3520C
Project#:	STANDARD	Analysis:	EPA 8270C-SIM
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC677461	Batch#:	195713
Matrix:	Water	Prepared:	02/20/13
Units:	ug/L	Analyzed:	02/21/13

Analyte	Result	RL
Naphthalene	ND	0.1
Acenaphthylene	ND	0.1
Acenaphthene	ND	0.1
Fluorene	ND	0.1
Phenanthrene	ND	0.1
Anthracene	ND	0.1
Fluoranthene	ND	0.1
Pyrene	ND	0.1
Benzo(a)anthracene	ND	0.1
Chrysene	ND	0.1
Benzo(b)fluoranthene	ND	0.1
Benzo(k)fluoranthene	ND	0.1
Benzo(a)pyrene	ND	0.1
Indeno(1,2,3-cd)pyrene	ND	0.1
Dibenz(a,h)anthracene	ND	0.1
Benzo(g,h,i)perylene	ND	0.1

Surrogate	%REC	Limits
Nitrobenzene-d5	61	48-130
2-Fluorobiphenyl	64	47-120
Terphenyl-d14	62	33-120

ND= Not Detected

RL= Reporting Limit

## Batch QC Report

Semivolatile Organics by GC/MS SIM			
Lab #:	243227	Location:	Levin
Client:	San Francisco Baykeeper	Prep:	EPA 3520C
Project#:	STANDARD	Analysis:	EPA 8270C-SIM
Matrix:	Water	Batch#:	195713
Units:	ug/L	Prepared:	02/20/13
Diln Fac:	1.000	Analyzed:	02/21/13

Type: BS Lab ID: QC677462

Analyte	Spiked	Result	%REC	Limits
Acenaphthene	1.000	0.9790	98	52-120
Pyrene	1.000	0.8836	88	45-120

Surrogate	%REC	Limits
Nitrobenzene-d5	67	48-130
2-Fluorobiphenyl	86	47-120
Terphenyl-d14	81	33-120

Type: BSD Lab ID: QC677463

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Acenaphthene	1.000	0.9242	92	52-120	6	72
Pyrene	1.000	0.8052	81	45-120	9	53

Surrogate	%REC	Limits
Nitrobenzene-d5	60	48-130
2-Fluorobiphenyl	80	47-120
Terphenyl-d14	72	33-120

RPD= Relative Percent Difference

### Metals Analytical Report

Lab #:	243227	Project#:	STANDARD
Client:	San Francisco Baykeeper	Location:	Levin
Field ID:	LEVIN 1	Units:	ug/L
Lab ID:	243227-001	Sampled:	02/19/13
Matrix:	Water	Received:	02/19/13

Analyte	Result	RL	Diln	Fac	Batch#	Prepared	Analyzed	Prep	Analysis
Aluminum	93	50	5.000		195729	02/20/13	02/21/13	EPA 200.8	EPA 6020
Copper	5.1	2.3	5.000		195729	02/20/13	02/22/13	EPA 200.8	EPA 6020
Iron	480	50	5.000		195729	02/20/13	02/21/13	EPA 200.8	EPA 6020
Lead	4.8	1.0	5.000		195729	02/20/13	02/22/13	EPA 200.8	EPA 6020
Mercury	ND	0.20	1.000		195746	02/21/13	02/21/13	METHOD	EPA 7470A
Nickel	ND	1.0	5.000		195729	02/20/13	02/21/13	EPA 200.8	EPA 6020
Vanadium	56	1.0	5.000		195729	02/20/13	02/21/13	EPA 200.8	EPA 6020
Zinc	73	20	5.000		195729	02/20/13	02/21/13	EPA 200.8	EPA 6020

ND= Not Detected  
 RL= Reporting Limit

## Batch QC Report

Metals Analytical Report			
Lab #:	243227	Location:	Levin
Client:	San Francisco Baykeeper	Prep:	EPA 200.8
Project#:	STANDARD	Analysis:	EPA 6020
Type:	BLANK	Diln Fac:	5.000
Lab ID:	QC677522	Batch#:	195729
Matrix:	Water	Prepared:	02/20/13
Units:	ug/L	Analyzed:	02/21/13

Analyte	Result	RL
Aluminum	ND	50
Copper	ND	2.3
Iron	ND	50
Lead	ND	1.0
Nickel	ND	1.0
Vanadium	ND	1.0
Zinc	ND	20

ND= Not Detected  
RL= Reporting Limit

## Batch QC Report

Metals Analytical Report			
Lab #:	243227	Location:	Levin
Client:	San Francisco Baykeeper	Prep:	EPA 200.8
Project#:	STANDARD	Analysis:	EPA 6020
Matrix:	Water	Batch#:	195729
Units:	ug/L	Prepared:	02/20/13
Diln Fac:	5.000		

Type: BS Lab ID: QC677523

Analyte	Spiked	Result	%REC	Limits	Analyzed
Aluminum	10,000	9,415	94	71-122	02/21/13
Copper	100.0	91.60	92	67-123	02/21/13
Iron	10,000	9,675	97	69-125	02/21/13
Lead	100.0	105.1	105	76-120	02/22/13
Nickel	100.0	93.40	93	72-120	02/21/13
Vanadium	100.0	92.95	93	74-120	02/21/13
Zinc	100.0	100.5	100	71-123	02/21/13

Type: BSD Lab ID: QC677524

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	Analyzed
Aluminum	10,000	9,300	93	71-122	1	23	02/21/13
Copper	100.0	94.80	95	67-123	3	22	02/21/13
Iron	10,000	9,785	98	69-125	1	31	02/21/13
Lead	100.0	104.9	105	76-120	0	22	02/22/13
Nickel	100.0	89.75	90	72-120	4	23	02/21/13
Vanadium	100.0	89.65	90	74-120	4	20	02/21/13
Zinc	100.0	107.2	107	71-123	6	32	02/21/13

RPD= Relative Percent Difference

## Batch QC Report

Metals Analytical Report			
Lab #:	243227	Location:	Levin
Client:	San Francisco Baykeeper	Prep:	EPA 200.8
Project#:	STANDARD	Analysis:	EPA 6020
Field ID:	ZZZZZZZZZZ	Batch#:	195729
MSS Lab ID:	243208-001	Sampled:	02/19/13
Matrix:	Water	Received:	02/19/13
Units:	ug/L	Prepared:	02/20/13
Diln Fac:	5.000		

Type: MS Lab ID: QC677525

Analyte	MSS Result	Spiked	Result	%REC	Limits	Analyzed
Aluminum	19.16	10,000	8,630	86	66-126	02/21/13
Copper	<0.7631	100.0	82.25	82	59-123	02/21/13
Iron	11.31	10,000	8,915	89	62-128	02/21/13
Lead	<0.2907	100.0	96.65	97	70-120	02/22/13
Nickel	<0.1769	100.0	83.15	83	62-120	02/21/13
Vanadium	0.4135	100.0	85.35	85	67-120	02/21/13
Zinc	20.32	100.0	103.8	83	57-130	02/21/13

Type: MSD Lab ID: QC677526

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	Analyzed
Aluminum	10,000	8,400	84	66-126	3	20	02/21/13
Copper	100.0	81.45	81	59-123	1	34	02/21/13
Iron	10,000	8,865	89	62-128	1	39	02/21/13
Lead	100.0	91.85	92	70-120	5	21	02/22/13
Nickel	100.0	80.15	80	62-120	4	37	02/21/13
Vanadium	100.0	84.75	84	67-120	1	39	02/21/13
Zinc	100.0	98.30	78	57-130	5	38	02/21/13

RPD= Relative Percent Difference



## Batch QC Report

Metals Analytical Report			
Lab #:	243227	Location:	Levin
Client:	San Francisco Baykeeper	Prep:	METHOD
Project#:	STANDARD	Analysis:	EPA 7470A
Analyte:	Mercury	Diln Fac:	1.000
Type:	BLANK	Batch#:	195746
Lab ID:	QC677591	Prepared:	02/21/13
Matrix:	Water	Analyzed:	02/21/13
Units:	ug/L		

Result	RL
ND	0.20

ND= Not Detected  
RL= Reporting Limit

## Batch QC Report

Metals Analytical Report			
Lab #:	243227	Location:	Levin
Client:	San Francisco Baykeeper	Prep:	METHOD
Project#:	STANDARD	Analysis:	EPA 7470A
Analyte:	Mercury	Batch#:	195746
Matrix:	Water	Prepared:	02/21/13
Units:	ug/L	Analyzed:	02/21/13
Diln Fac:	1.000		

Type	Lab ID	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC677592	2.500	2.480	99	80-120		
BSD	QC677593	2.500	2.510	100	80-120	1	20

RPD= Relative Percent Difference

## Batch QC Report

Metals Analytical Report			
Lab #:	243227	Location:	Levin
Client:	San Francisco Baykeeper	Prep:	METHOD
Project#:	STANDARD	Analysis:	EPA 7470A
Analyte:	Mercury	Batch#:	195746
Field ID:	ZZZZZZZZZZ	Sampled:	02/15/13
MSS Lab ID:	243146-001	Received:	02/15/13
Matrix:	Water	Prepared:	02/21/13
Units:	ug/L	Analyzed:	02/21/13
Diln Fac:	1.000		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC677594	<0.03605	2.500	2.500	100	62-124		
MSD	QC677595		2.500	2.590	104	62-124	4	35

RPD= Relative Percent Difference

### Dissolved Metals Analytical Report

Lab #:	243227	Location:	Levin
Client:	San Francisco Baykeeper	Prep:	METHOD
Project#:	STANDARD		
Field ID:	LEVIN 1	Units:	ug/L
Lab ID:	243227-001	Sampled:	02/19/13
Matrix:	Filtrate	Received:	02/19/13

Analyte	Result	RL	Diln Fac	Batch#	Prepared	Analyzed	Analysis
Aluminum	ND	50	5.000	195809	02/24/13	02/25/13	EPA 6020
Copper	4.6	2.3	5.000	195809	02/24/13	02/25/13	EPA 6020
Iron	180	50	5.000	195809	02/24/13	02/25/13	EPA 6020
Lead	1.0	1.0	5.000	195809	02/24/13	02/25/13	EPA 6020
Mercury	ND	0.20	1.000	195746	02/21/13	02/21/13	EPA 7470A
Nickel	1.6	1.0	5.000	195809	02/24/13	02/25/13	EPA 6020
Vanadium	53	1.0	5.000	195809	02/24/13	02/25/13	EPA 6020
Zinc	36	20	5.000	195809	02/24/13	02/25/13	EPA 6020

ND= Not Detected  
RL= Reporting Limit

## Batch QC Report

Dissolved Metals Analytical Report			
Lab #:	243227	Location:	Levin
Client:	San Francisco Baykeeper	Prep:	METHOD
Project#:	STANDARD	Analysis:	EPA 7470A
Analyte:	Mercury	Diln Fac:	1.000
Type:	BLANK	Batch#:	195746
Lab ID:	QC677591	Prepared:	02/21/13
Matrix:	Water	Analyzed:	02/21/13
Units:	ug/L		

Result	RL
ND	0.20

ND= Not Detected  
RL= Reporting Limit

## Batch QC Report

Dissolved Metals Analytical Report			
Lab #:	243227	Location:	Levin
Client:	San Francisco Baykeeper	Prep:	METHOD
Project#:	STANDARD	Analysis:	EPA 7470A
Analyte:	Mercury	Batch#:	195746
Matrix:	Water	Prepared:	02/21/13
Units:	ug/L	Analyzed:	02/21/13
Diln Fac:	1.000		

Type	Lab ID	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC677592	2.500	2.480	99	80-120		
BSD	QC677593	2.500	2.510	100	80-120	1	20

RPD= Relative Percent Difference

## Batch QC Report

Dissolved Metals Analytical Report			
Lab #:	243227	Location:	Levin
Client:	San Francisco Baykeeper	Prep:	METHOD
Project#:	STANDARD	Analysis:	EPA 7470A
Analyte:	Mercury	Batch#:	195746
Field ID:	ZZZZZZZZZZ	Sampled:	02/15/13
MSS Lab ID:	243146-001	Received:	02/15/13
Matrix:	Water	Prepared:	02/21/13
Units:	ug/L	Analyzed:	02/21/13
Diln Fac:	1.000		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC677594	<0.03605	2.500	2.500	100	62-124		
MSD	QC677595		2.500	2.590	104	62-124	4	35

RPD= Relative Percent Difference

## Batch QC Report

Dissolved Metals Analytical Report			
Lab #:	243227	Location:	Levin
Client:	San Francisco Baykeeper	Prep:	METHOD
Project#:	STANDARD	Analysis:	EPA 6020
Type:	BLANK	Diln Fac:	5.000
Lab ID:	QC677828	Batch#:	195809
Matrix:	Filtrate	Prepared:	02/24/13
Units:	ug/L		

Analyte	Result	RL	Analyzed
Aluminum	ND	50	02/25/13
Copper	ND	2.3	02/26/13
Iron	ND	50	02/26/13
Lead	ND	1.0	02/25/13
Nickel	ND	1.0	02/25/13
Vanadium	ND	1.0	02/25/13
Zinc	ND	20	02/25/13

ND= Not Detected  
RL= Reporting Limit



## Batch QC Report

Dissolved Metals Analytical Report			
Lab #:	243227	Location:	Levin
Client:	San Francisco Baykeeper	Prep:	METHOD
Project#:	STANDARD	Analysis:	EPA 6020
Type:	LCS	Diln Fac:	5.000
Lab ID:	QC677829	Batch#:	195809
Matrix:	Filtrate	Prepared:	02/24/13
Units:	ug/L	Analyzed:	02/25/13

Analyte	Spiked	Result	%REC	Limits
Aluminum	10,000	10,410	104	71-122
Copper	100.0	101.4	101	67-123
Iron	10,000	9,595	96	69-125
Lead	100.0	102.1	102	76-120
Nickel	100.0	103.2	103	72-120
Vanadium	100.0	96.55	97	74-120
Zinc	100.0	99.40	99	71-123

## Batch QC Report

Dissolved Metals Analytical Report			
Lab #:	243227	Location:	Levin
Client:	San Francisco Baykeeper	Prep:	METHOD
Project#:	STANDARD	Analysis:	EPA 6020
Field ID:	ZZZZZZZZZZ	Batch#:	195809
MSS Lab ID:	243342-005	Sampled:	02/20/13
Matrix:	Filtrate	Received:	02/22/13
Units:	ug/L	Prepared:	02/24/13
Diln Fac:	5.000	Analyzed:	02/25/13

Type: MS Lab ID: QC677830

Analyte	MSS Result	Spiked	Result	%REC	Limits
Aluminum	37.61	10,000	10,470	104	66-126
Copper	2.989	100.0	99.70	97	59-123
Iron	52.85	10,000	10,470	104	62-128
Lead	<0.2907	100.0	99.85	100	70-120
Nickel	1.649	100.0	101.0	99	62-120
Vanadium	7.385	100.0	104.9	97	67-120
Zinc	7.550	100.0	106.2	99	57-130

Type: MSD Lab ID: QC677831

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aluminum	10,000	10,190	101	66-126	3	20
Copper	100.0	98.60	96	59-123	1	34
Iron	10,000	10,290	102	62-128	2	39
Lead	100.0	101.0	101	70-120	1	21
Nickel	100.0	99.20	98	62-120	2	37
Vanadium	100.0	102.9	95	67-120	2	39
Zinc	100.0	99.90	92	57-130	6	38

RPD= Relative Percent Difference

### Hydrocarbon Oil & Grease (SGT-HEM)

Lab #:	243227	Location:	Levin
Client:	San Francisco Baykeeper	Prep:	METHOD
Project#:	STANDARD	Analysis:	EPA 1664A
Analyte:	Hydrocarbon Oil & Grease	Batch#:	195782
Field ID:	LEVIN 1	Sampled:	02/19/13
Matrix:	Water	Received:	02/19/13
Units:	mg/L	Analyzed:	02/21/13
Diln Fac:	1.000		

Type	Lab ID	Result	RL
SAMPLE	243227-001	ND	5.00
BLANK	QC677727	ND	5.00

ND= Not Detected  
RL= Reporting Limit

## Batch QC Report

Hydrocarbon Oil & Grease (SGT-HEM)			
Lab #:	243227	Location:	Levin
Client:	San Francisco Baykeeper	Prep:	METHOD
Project#:	STANDARD	Analysis:	EPA 1664A
Analyte:	Hydrocarbon Oil & Grease	Diln Fac:	1.000
Matrix:	Water	Batch#:	195782
Units:	mg/L	Analyzed:	02/21/13

Type	Lab ID	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC677728	20.00	15.70	79	64-132		
BSD	QC677729	20.00	15.80	79	64-132	1	34

RPD= Relative Percent Difference

Total Suspended Solids (TSS)			
Lab #:	243227	Location:	Levin
Client:	San Francisco Baykeeper	Prep:	METHOD
Project#:	STANDARD	Analysis:	EPA 160.2
Analyte:	Total Suspended Solids	Batch#:	195652
Field ID:	LEVIN 1	Sampled:	02/19/13
Matrix:	Water	Received:	02/19/13
Units:	mg/L	Analyzed:	02/19/13
Diln Fac:	1.000		

Type	Lab ID	Result	RL
SAMPLE	243227-001	38	5
BLANK	QC677188	ND	5

ND= Not Detected  
RL= Reporting Limit

## Batch QC Report

Total Suspended Solids (TSS)			
Lab #:	243227	Location:	Levin
Client:	San Francisco Baykeeper	Prep:	METHOD
Project#:	STANDARD	Analysis:	EPA 160.2
Analyte:	Total Suspended Solids	Diln Fac:	1.000
Field ID:	ZZZZZZZZZZ	Batch#:	195652
MSS Lab ID:	243209-003	Sampled:	02/19/13
Matrix:	Water	Received:	02/19/13
Units:	mg/L	Analyzed:	02/19/13

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC677189		50.00	46.00	92	80-120		
BSD	QC677190		50.00	48.00	96	80-120	4	5
MS	QC677299	235.0	50.00	285.0	100 NM	61-129		
MSD	QC677300		50.00	285.0	100 NM	61-129	0	5

NM= Not Meaningful: Sample concentration > 4X spike concentration  
RPD= Relative Percent Difference

## ANALYTICAL REPORT

Job Number: 720-47852-1

Job Description: LRTC Stormwater

For:

Weiss Associates  
2200 Powell Street  
Suite 925

Emeryville, CA 94608

Attention: Greg Hulburt



Approved for release.  
Micah Smith  
Project Manager I  
3/1/2013 4:56 PM

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Micah Smith  
Project Manager I  
micah.smith@testamericainc.com  
03/01/2013

CA ELAP Certification # 2496

The Chain(s) of Custody are included and are an integral part of this report.

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A trip blank is required to be provided for volatile analyses. If trip blank results are not included in the report, either the trip blank was not submitted or requested to be analyzed.

**TestAmerica Laboratories, Inc.**

TestAmerica Pleasanton 1220 Quarry Lane, Pleasanton, CA 94566

Tel (925) 484-1919 Fax (925) 600-3002 [www.testamericainc.com](http://www.testamericainc.com)

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**Job Narrative**  
**720-47852-1**

**Comments**

As requested TSS and TPH-gas have been analyzed, PAH were extracted but not analyzed, and the dissolved metals were filtered but not analyzed. All other work placed on hold.

**Receipt**

The samples were received on 2/19/2013 3:55 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.2° C.

**GC/MS VOA**

No analytical or quality issues were noted.

**Metals**

No analytical or quality issues were noted.

**General Chemistry**

No analytical or quality issues were noted.

**Organic Prep**

No analytical or quality issues were noted.

## SAMPLE SUMMARY

Client: Weiss Associates

Job Number: 720-47852-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
720-47852-1	LRTC-SW-1	Water	02/19/2013 1105	02/19/2013 1555
720-47852-1MS	LRTC-SW-1	Water	02/19/2013 1105	02/19/2013 1555
720-47852-1MSD	LRTC-SW-1	Water	02/19/2013 1105	02/19/2013 1555

## EXECUTIVE SUMMARY - Detections

Client: Weiss Associates

Job Number: 720-47852-1

Lab Sample ID Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
720-47852-1 Total Suspended Solids	LRTC-SW-1	61		10	mg/L	SM 2540D

## METHOD SUMMARY

Client: Weiss Associates

Job Number: 720-47852-1

Description	Lab Location	Method	Preparation Method
<b>Matrix: Water</b>			
8260B / CA LUFT MS	TAL SF	SW846 8260B/CA_LUFTMS	
Purge and Trap	TAL SF		SW846 5030B
Solids, Total Suspended (TSS)	TAL IRV	SM SM 2540D	

### Lab References:

TAL IRV = TestAmerica Irvine

TAL SF = TestAmerica Pleasanton

### Method References:

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

## METHOD / ANALYST SUMMARY

Client: Weiss Associates

Job Number: 720-47852-1

Method	Analyst	Analyst ID
SW846 8260B/CA_LUFTMS	Dibbs Rodriguez, Paloma	PD
SM SM 2540D	Kristofik, Dushan	DK

**Analytical Data**

Client: Weiss Associates

Job Number: 720-47852-1

**Client Sample ID:** LRTC-SW-1

Lab Sample ID: 720-47852-1

Date Sampled: 02/19/2013 1105

Client Matrix: Water

Date Received: 02/19/2013 1555

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**8260B/CA\_LUFTMS 8260B / CA LUFT MS**

Analysis Method: 8260B/CA\_LUFTMS

Analysis Batch: 720-131252

Instrument ID: HP12

Prep Method: 5030B

Prep Batch: N/A

Lab File ID: 02261321.D

Dilution: 1.0

Initial Weight/Volume: 10 mL

Analysis Date: 02/26/2013 1626

Final Weight/Volume: 10 mL

Prep Date: 02/26/2013 1626

Analyte	Result (ug/L)	Qualifier	MDL	RL
Gasoline Range Organics (GRO)-C5-C12	ND		21	50

Surrogate	%Rec	Qualifier	Acceptance Limits
4-Bromofluorobenzene	94		67 - 130
1,2-Dichloroethane-d4 (Surr)	99		75 - 138
Toluene-d8 (Surr)	96		70 - 130

## Analytical Data

Client: Weiss Associates

Job Number: 720-47852-1

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### General Chemistry

Client Sample ID: LRTC-SW-1

Lab Sample ID: 720-47852-1

Client Matrix: Water

Date Sampled: 02/19/2013 1105

Date Received: 02/19/2013 1555

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Total Suspended Solids	61		mg/L	10	10	1.0	SM 2540D
Analysis Batch: 440-86983		Analysis Date: 02/21/2013 1549					



Client: Weiss Associates

Job Number: 720-47852-1

**Surrogate Recovery Report****8260B/CA LUFTMS 8260B / CA LUFT MS****Client Matrix: Water**

Lab Sample ID	Client Sample ID	DCA %Rec	TOL %Rec	BFB %Rec
720-47852-1	LRTC-SW-1	99	96	94
MB 720-131252/4		100	97	98
LCS 720-131252/10		100	101	103
LCSD 720-131252/11		104	102	103
720-47852-1 MS	LRTC-SW-1 MS	101	100	98
720-47852-1 MSD	LRTC-SW-1 MSD	98	100	99

Surrogate	Acceptance Limits
DCA = 1,2-Dichloroethane-d4 (Surr)	75-138
TOL = Toluene-d8 (Surr)	70-130
BFB = 4-Bromofluorobenzene	67-130

## Quality Control Results

Client: Weiss Associates

Job Number: 720-47852-1

### Method Blank - Batch: 720-131252

Method: 8260B/CA\_LUFTMS

Preparation: 5030B

Lab Sample ID:	MB 720-131252/4	Analysis Batch:	720-131252	Instrument ID:	HP12
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	02261304.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	10 mL
Analysis Date:	02/26/2013 0804	Units:	ug/L	Final Weight/Volume:	10 mL
Prep Date:	02/26/2013 0804				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Gasoline Range Organics (GRO)-C5-C12	36.6	J	21	50
Surrogate	% Rec	Acceptance Limits		
4-Bromofluorobenzene	98	67 - 130		
1,2-Dichloroethane-d4 (Surr)	100	75 - 138		
Toluene-d8 (Surr)	97	70 - 130		

### Lab Control Sample/

Method: 8260B/CA\_LUFTMS

### Lab Control Sample Duplicate Recovery Report - Batch: 720-131252

Preparation: 5030B

LCS Lab Sample ID:	LCS 720-131252/10	Analysis Batch:	720-131252	Instrument ID:	HP12
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	02261311.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	10 mL
Analysis Date:	02/26/2013 1140	Units:	ug/L	Final Weight/Volume:	10 mL
Prep Date:	02/26/2013 1140				
Leach Date:	N/A				

LCSD Lab Sample ID:	LCSD 720-131252/11	Analysis Batch:	720-131252	Instrument ID:	HP12
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	02261310.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	10 mL
Analysis Date:	02/26/2013 1112	Units:	ug/L	Final Weight/Volume:	10 mL
Prep Date:	02/26/2013 1112				
Leach Date:	N/A				

Analyte	% Rec.		Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD					
Gasoline Range Organics (GRO)-C5-C12	104	106	62 - 120	2	20		
Surrogate	LCS % Rec		LCSD % Rec		Acceptance Limits		
4-Bromofluorobenzene	103		103		67 - 130		
1,2-Dichloroethane-d4 (Surr)	100		104		75 - 138		
Toluene-d8 (Surr)	101		102		70 - 130		

## Quality Control Results

Client: Weiss Associates

Job Number: 720-47852-1

### Laboratory Control/ Laboratory Duplicate Data Report - Batch: 720-131252

Method: 8260B/CA\_LUFTMS  
Preparation: 5030B

LCS Lab Sample ID: LCS 720-131252/10 Units: ug/L  
Client Matrix: Water  
Dilution: 1.0  
Analysis Date: 02/26/2013 1140  
Prep Date: 02/26/2013 1140  
Leach Date: N/A

LCSD Lab Sample ID: LCSD 720-131252/11  
Client Matrix: Water  
Dilution: 1.0  
Analysis Date: 02/26/2013 1112  
Prep Date: 02/26/2013 1112  
Leach Date: N/A

Analyte	LCS Spike Amount	LCSD Spike Amount	LCS Result/Qual	LCSD Result/Qual
Gasoline Range Organics (GRO)-C5-C12	500	500	520	530

### Matrix Spike/ Matrix Spike Duplicate Recovery Report - Batch: 720-131252

Method: 8260B/CA\_LUFTMS  
Preparation: 5030B

MS Lab Sample ID: 720-47852-1  
Client Matrix: Water  
Dilution: 1.0  
Analysis Date: 02/26/2013 1654  
Prep Date: 02/26/2013 1654  
Leach Date: N/A

Analysis Batch: 720-131252  
Prep Batch: N/A  
Leach Batch: N/A

Instrument ID: HP12  
Lab File ID: 02261322.D  
Initial Weight/Volume: 10 mL  
Final Weight/Volume: 10 mL

MSD Lab Sample ID: 720-47852-1  
Client Matrix: Water  
Dilution: 1.0  
Analysis Date: 02/26/2013 1723  
Prep Date: 02/26/2013 1723  
Leach Date: N/A

Analysis Batch: 720-131252  
Prep Batch: N/A  
Leach Batch: N/A

Instrument ID: HP12  
Lab File ID: 02261323.D  
Initial Weight/Volume: 10 mL  
Final Weight/Volume: 10 mL

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Gasoline Range Organics (GRO)-C5-C12	92	92	60 - 140	1	20		
Surrogate	MS % Rec		MSD % Rec	Acceptance Limits			
4-Bromofluorobenzene	98		99	67 - 130			
1,2-Dichloroethane-d4 (Surr)	101		98	75 - 138			
Toluene-d8 (Surr)	100		100	70 - 130			

## Quality Control Results

Client: Weiss Associates

Job Number: 720-47852-1

### Matrix Spike/

**Matrix Spike Duplicate Recovery Report - Batch: 720-131252**

**Method: 8260B/CA\_LUFTMS**

**Preparation: 5030B**

MS Lab Sample ID: 720-47852-1 Units: ug/L  
Client Matrix: Water  
Dilution: 1.0  
Analysis Date: 02/26/2013 1654  
Prep Date: 02/26/2013 1654  
Leach Date: N/A

MSD Lab Sample ID: 720-47852-1  
Client Matrix: Water  
Dilution: 1.0  
Analysis Date: 02/26/2013 1723  
Prep Date: 02/26/2013 1723  
Leach Date: N/A

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Gasoline Range Organics (GRO)-C5-C12	ND	500	500	458	462

## Quality Control Results

Client: Weiss Associates

Job Number: 720-47852-1

### Method Blank - Batch: 440-86983

### Method: SM 2540D

### Preparation: N/A

Lab Sample ID:	MB 440-86983/1	Analysis Batch:	440-86983	Instrument ID:	BAL067
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	100 mL
Analysis Date:	02/21/2013 1549	Units:	mg/L	Final Weight/Volume:	100 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Total Suspended Solids	ND		10	10

### Lab Control Sample - Batch: 440-86983

### Method: SM 2540D

### Preparation: N/A

Lab Sample ID:	LCS 440-86983/2	Analysis Batch:	440-86983	Instrument ID:	BAL067
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	100 mL
Analysis Date:	02/21/2013 1549	Units:	mg/L	Final Weight/Volume:	100 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Total Suspended Solids	1000	993	99	85 - 115	

## DATA REPORTING QUALIFIERS

Client: Weiss Associates

Job Number: 720-47852-1

Lab Section	Qualifier	Description
GC/MS VOA	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

## Quality Control Results

Client: Weiss Associates

Job Number: 720-47852-1

### QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
<b>GC/MS VOA</b>					
<b>Analysis Batch:720-131252</b>					
LCS 720-131252/10	Lab Control Sample	T	Water	8260B/CA_LUFT	
LCSD 720-131252/11	Lab Control Sample Duplicate	T	Water	8260B/CA_LUFT	
MB 720-131252/4	Method Blank	T	Water	8260B/CA_LUFT	
720-47852-1	LRTC-SW-1	T	Water	8260B/CA_LUFT	
720-47852-1MS	Matrix Spike	T	Water	8260B/CA_LUFT	
720-47852-1MSD	Matrix Spike Duplicate	T	Water	8260B/CA_LUFT	

#### Report Basis

T = Total

### General Chemistry

<b>Analysis Batch:440-86983</b>					
LCS 440-86983/2	Lab Control Sample	T	Water	SM 2540D	
MB 440-86983/1	Method Blank	T	Water	SM 2540D	
720-47852-1	LRTC-SW-1	T	Water	SM 2540D	

#### Report Basis

T = Total

## Quality Control Results

Client: Weiss Associates

Job Number: 720-47852-1

### Laboratory Chronicle

Lab ID: 720-47852-1

Client ID: LRTC-SW-1

Sample Date/Time: 02/19/2013 11:05

Received Date/Time: 02/19/2013 15:55

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030B	720-47852-A-1		720-131252		02/26/2013 16:26	1	TAL SF	PD
A:8260B/CA_LUF TMS	720-47852-A-1		720-131252		02/26/2013 16:26	1	TAL SF	PD
A:SM 2540D	720-47852-F-1		440-86983		02/21/2013 15:49	1	TAL IRV	DK

Lab ID: 720-47852-1

Client ID: LRTC-SW-1

Sample Date/Time: 02/19/2013 11:05

Received Date/Time: 02/19/2013 15:55

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030B	720-47852-A-1 MS		720-131252		02/26/2013 16:54	1	TAL SF	PD
A:8260B/CA_LUF TMS	720-47852-A-1 MS		720-131252		02/26/2013 16:54	1	TAL SF	PD

Lab ID: 720-47852-1

Client ID: LRTC-SW-1

Sample Date/Time: 02/19/2013 11:05

Received Date/Time: 02/19/2013 15:55

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030B	720-47852-A-1 MSD		720-131252		02/26/2013 17:23	1	TAL SF	PD
A:8260B/CA_LUF TMS	720-47852-A-1 MSD		720-131252		02/26/2013 17:23	1	TAL SF	PD

Lab ID: MB

Client ID: N/A

Sample Date/Time: N/A

Received Date/Time: N/A

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030B	MB 720-131252/4		720-131252		02/26/2013 08:04	1	TAL SF	PD
A:8260B/CA_LUF TMS	MB 720-131252/4		720-131252		02/26/2013 08:04	1	TAL SF	PD
A:SM 2540D	MB 440-86983/1		440-86983		02/21/2013 15:49	1	TAL IRV	DK

Lab ID: LCS

Client ID: N/A

Sample Date/Time: N/A

Received Date/Time: N/A

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030B	LCS 720-131252/10		720-131252		02/26/2013 11:40	1	TAL SF	PD
A:8260B/CA_LUF TMS	LCS 720-131252/10		720-131252		02/26/2013 11:40	1	TAL SF	PD
A:SM 2540D	LCS 440-86983/2		440-86983		02/21/2013 15:49	1	TAL IRV	DK



## Quality Control Results

Client: Weiss Associates

Job Number: 720-47852-1

### Laboratory Chronicle

Lab ID: LCSD

Client ID: N/A

Sample Date/Time: N/A

Received Date/Time: N/A

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030B	LCSD 720-131252/11		720-131252		02/26/2013 11:12	1	TAL SF	PD
A:8260B/CA_LUF TMS	LCSD 720-131252/11		720-131252		02/26/2013 11:12	1	TAL SF	PD

#### Lab References:

TAL IRV = TestAmerica Irvine

TAL SF = TestAmerica Pleasanton

## Certification Summary

Client: Weiss Associates  
Project/Site: LRTC Stormwater

TestAmerica Job ID: 720-47852-1

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica Pleasanton	California	State Program	9	2496
TestAmerica Irvine	Alaska	State Program	10	CA01531
TestAmerica Irvine	Arizona	State Program	9	AZ0671
TestAmerica Irvine	California	LA Cty Sanitation Districts	9	10256
TestAmerica Irvine	California	NELAP	9	1108CA
TestAmerica Irvine	California	State Program	9	2706
TestAmerica Irvine	Guam	State Program	9	Cert. No. 12.002r
TestAmerica Irvine	Nevada	State Program	9	CA015312007A
TestAmerica Irvine	Oregon	NELAP	10	4005
TestAmerica Irvine	USDA	Federal		P330-09-00080
TestAmerica Irvine	USEPA UCMR	Federal	1	CA01531

Accreditation may not be offered or required for all methods and analytes reported in this package Please contact your project manager for the laboratory's current list of certified methods and analytes.

# Method 8260B Low Level

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Volatile Organic Compounds (GC/MS)  
by Method 8260B Low Level

FORM II  
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Pleasanton Job No.: 720-47852-1  
SDG No.: \_\_\_\_\_  
Matrix: Water Level: Low  
GC Column (1): DB-VRX ID: 250 (um)

Client Sample ID	Lab Sample ID	DCA #	TOL #	BFB #
LRTC-SW-1	720-47852-1	99	96	94
	MB 720-131252/4	100	97	98
	LCS 720-131252/10	100	101	103
	LCSD 720-131252/11	104	102	103
LRTC-SW-1 MS	720-47852-1 MS	101	100	98
LRTC-SW-1 MSD	720-47852-1 MSD	98	100	99

	<u>QC LIMITS</u>
DCA = 1,2-Dichloroethane-d4 (Surr)	75-138
TOL = Toluene-d8 (Surr)	70-130
BFB = 4-Bromofluorobenzene	67-130

# Column to be used to flag recovery values

FORM II 8260B/CA\_LUFTMS

FORM III  
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Pleasanton Job No.: 720-47852-1  
SDG No.: \_\_\_\_\_  
Matrix: Water Level: Low Lab File ID: 02261311.D  
Lab ID: LCS 720-131252/10 Client ID: \_\_\_\_\_

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Gasoline Range Organics (GRO)-C5-C12	500	520	104	62-120	

# Column to be used to flag recovery and RPD values

FORM III  
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Pleasanton Job No.: 720-47852-1  
SDG No.: \_\_\_\_\_  
Matrix: Water Level: Low Lab File ID: 02261310.D  
Lab ID: LCSD 720-131252/11 Client ID: \_\_\_\_\_

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
Gasoline Range Organics (GRO)-C5-C12	500	530	106	2	20	62-120	

# Column to be used to flag recovery and RPD values

FORM III  
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Pleasanton Job No.: 720-47852-1  
SDG No.: \_\_\_\_\_  
Matrix: Water Level: Low Lab File ID: 02261322.D  
Lab ID: 720-47852-1 MS Client ID: LRTC-SW-1 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Gasoline Range Organics (GRO)-C5-C12	500	ND	458	92	60-140	

# Column to be used to flag recovery and RPD values

FORM III  
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Pleasanton Job No.: 720-47852-1  
SDG No.: \_\_\_\_\_  
Matrix: Water Level: Low Lab File ID: 02261323.D  
Lab ID: 720-47852-1 MSD Client ID: LRTC-SW-1 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
Gasoline Range Organics (GRO)-C5-C12	500	462	92	1	20	60-140	

# Column to be used to flag recovery and RPD values



FORM IV  
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Pleasanton Job No.: 720-47852-1  
SDG No.: \_\_\_\_\_  
Lab File ID: 02261304.D Lab Sample ID: MB 720-131252/4  
Matrix: Water Heated Purge: (Y/N) N  
Instrument ID: HP12 Date Analyzed: 02/26/2013 08:04  
GC Column: DB-VRX ID: 250 (um)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCSD 720-131252/11	02261310.D	02/26/2013 11:12
	LCS 720-131252/10	02261311.D	02/26/2013 11:40
LRTC-SW-1	720-47852-1	02261321.D	02/26/2013 16:26
LRTC-SW-1 MS	720-47852-1 MS	02261322.D	02/26/2013 16:54
LRTC-SW-1 MSD	720-47852-1 MSD	02261323.D	02/26/2013 17:23

FORM V  
GC/MS VOA INSTRUMENT PERFORMANCE CHECK  
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Pleasanton Job No.: 720-47852-1  
SDG No.: \_\_\_\_\_  
Lab File ID: 01241301.D BFB Injection Date: 01/24/2013  
Instrument ID: HP12 BFB Injection Time: 09:20  
Analysis Batch No.: 129366

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	18.3
75	30.0 - 60.0 % of mass 95	46.7
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0 % of mass 95	6.8
173	Less than 2.0 % of mass 174	0.0 (0.0) 1
174	50.0 - 120.00 % of mass 95	75.3
175	5.0 - 9.0 % of mass 174	5.8 (7.7) 1
176	95.0 - 101.0 % of mass 174	73.1 (97.0) 1
177	5.0 - 9.0 % of mass 176	4.9 (6.7) 2

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD50 720-129366/4	01241314.D	01/24/2013	10:52
	STD100 720-129366/5	01241315.D	01/24/2013	11:21
	STD200 720-129366/6	01241316.D	01/24/2013	11:49
	STD500 720-129366/7	01241317.D	01/24/2013	12:18
	STD1000 720-129366/8	01241318.D	01/24/2013	12:46
	STD2000 720-129366/9	01241319.D	01/24/2013	13:15
	STD4000 720-129366/10	01241320.D	01/24/2013	13:43

FORM V  
GC/MS VOA INSTRUMENT PERFORMANCE CHECK  
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Pleasanton Job No.: 720-47852-1  
SDG No.: \_\_\_\_\_  
Lab File ID: 02061302.D BFB Injection Date: 02/06/2013  
Instrument ID: HP12 BFB Injection Time: 16:49  
Analysis Batch No.: 130203

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	21.0
75	30.0 - 60.0 % of mass 95	53.0
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0 % of mass 95	6.7
173	Less than 2.0 % of mass 174	0.0 (0.0) 1
174	50.0 - 120.00 % of mass 95	71.4
175	5.0 - 9.0 % of mass 174	5.4 (7.6) 1
176	95.0 - 101.0 % of mass 174	69.5 (97.4) 1
177	5.0 - 9.0 % of mass 176	4.7 (6.7) 2

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD01 720-130203/5	02061305.D	02/06/2013	18:14
	STD02 720-130203/6	02061306.D	02/06/2013	18:43
	STD05 720-130203/7	02061307.D	02/06/2013	19:11
	STD1 720-130203/8	02061308.D	02/06/2013	19:40
	STD2 720-130203/9	02061309.D	02/06/2013	20:08
	STD5 720-130203/10	02061310.D	02/06/2013	20:37
	STD10 720-130203/11	02061311.D	02/06/2013	21:05
	STD20 720-130203/12	02061312.D	02/06/2013	21:34
	STD50 720-130203/13	02061313.D	02/06/2013	22:03
	STD100 720-130203/14	02061314.D	02/06/2013	22:31
	STD200 720-130203/15	02061315.D	02/06/2013	23:00

FORM V  
GC/MS VOA INSTRUMENT PERFORMANCE CHECK  
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Pleasanton Job No.: 720-47852-1  
 SDG No.: \_\_\_\_\_  
 Lab File ID: 02261301.D BFB Injection Date: 02/26/2013  
 Instrument ID: HP12 BFB Injection Time: 06:21  
 Analysis Batch No.: 131252

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	20.3
75	30.0 - 60.0 % of mass 95	53.7
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0 % of mass 95	6.7
173	Less than 2.0 % of mass 174	0.0 (0.0) 1
174	50.0 - 120.00 % of mass 95	80.3
175	5.0 - 9.0 % of mass 174	6.2 (7.7) 1
176	95.0 - 101.0 % of mass 174	78.2 (97.4) 1
177	5.0 - 9.0 % of mass 176	5.1 (6.6) 2

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 720-131252/2	02261302.D	02/26/2013	06:49
	CCV 720-131252/3	02261303.D	02/26/2013	07:17
	MB 720-131252/4	02261304.D	02/26/2013	08:04
	LCSD 720-131252/11	02261310.D	02/26/2013	11:12
	LCS 720-131252/10	02261311.D	02/26/2013	11:40
LRTC-SW-1	720-47852-1	02261321.D	02/26/2013	16:26
LRTC-SW-1 MS	720-47852-1 MS	02261322.D	02/26/2013	16:54
LRTC-SW-1 MSD	720-47852-1 MSD	02261323.D	02/26/2013	17:23

FORM VIII  
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Pleasanton Job No.: 720-47852-1  
 SDG No.: \_\_\_\_\_  
 Sample No.: CCVIS 720-131252/2 Date Analyzed: 02/26/2013 06:49  
 Instrument ID: HP12 GC Column: DB-VRX ID: 250 (um)  
 Lab File ID (Standard): 02261302.D Heated Purge: (Y/N) N  
 Calibration ID: 17714

	TBA		FB		CBZ	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD	156113	7.09	1040580	10.85	864641	14.68
UPPER LIMIT	312226	37.09	2081160	40.85	1729282	44.68
LOWER LIMIT	78057	-22.91	520290	-19.15	432321	-15.32
LAB SAMPLE ID	CLIENT SAMPLE ID					
CCV 720-131252/3		163337	7.09	1065891	10.85	859540 14.68
MB 720-131252/4		183504	7.09	1076078	10.85	829484 14.68
LCSD 720-131252/11		204235	7.09	1180111	10.86	962988 14.69
LCS 720-131252/10		225630	7.10	1200679	10.86	971650 14.68
720-47852-1	LRTC-SW-1	245616	7.09	1378208	10.85	1066405 14.68
720-47852-1 MS	LRTC-SW-1 MS	227214	7.10	1316475	10.86	1036421 14.68
720-47852-1 MSD	LRTC-SW-1 MSD	226820	7.10	1358146	10.86	1069167 14.68

TBA = TBA-d9 (IS)  
 FB = Fluorobenzene  
 CBZ = Chlorobenzene-d5

Area Limit = 50%-200% of internal standard area  
 RT Limit =  $\pm$  30 minutes of internal standard RT

# Column used to flag values outside QC limits

FORM VIII  
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Pleasanton Job No.: 720-47852-1  
 SDG No.: \_\_\_\_\_  
 Sample No.: CCVIS 720-131252/2 Date Analyzed: 02/26/2013 06:49  
 Instrument ID: HP12 GC Column: DB-VRX ID: 250 (um)  
 Lab File ID (Standard): 02261302.D Heated Purge: (Y/N) N  
 Calibration ID: 17714

		DCB					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		460176	17.82				
UPPER LIMIT		920352	47.82				
LOWER LIMIT		230088	-12.18				
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 720-131252/3		455109	17.82				
MB 720-131252/4		437323	17.81				
LCSD 720-131252/11		513158	17.82				
LCS 720-131252/10		528388	17.82				
720-47852-1	LRTC-SW-1	522833	17.82				
720-47852-1 MS	LRTC-SW-1 MS	520286	17.82				
720-47852-1 MSD	LRTC-SW-1 MSD	539592	17.82				

DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area  
 RT Limit =  $\pm$  30 minutes of internal standard RT

# Column used to flag values outside QC limits

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-47852-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: LRTC-SW-1 Lab Sample ID: 720-47852-1  
 Matrix: Water Lab File ID: 02261321.D  
 Analysis Method: 8260B/CA\_LUFTMS Date Collected: 02/19/2013 11:05  
 Sample wt/vol: 10 (mL) Date Analyzed: 02/26/2013 16:26  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: DB-VRX ID: 250 (um)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 131252 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00349	Gasoline Range Organics (GRO)-C5-C12	ND		50	21

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	94		67-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	99		75-138
2037-26-5	Toluene-d8 (Surr)	96		70-130

FORM VI  
GC/MS VOA INITIAL CALIBRATION DATA  
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Pleasanton Job No.: 720-47852-1 Analy Batch No.: 129366

SDG No.: \_\_\_\_\_

Instrument ID: HP12 GC Column: DB-VRX ID: 250 (um) Heated Purge: (Y/N) N

Calibration Start Date: 01/24/2013 10:52 Calibration End Date: 01/24/2013 13:43 Calibration ID: 17560

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD50 720-129366/4	01241314.D
Level 2	STD100 720-129366/5	01241315.D
Level 3	STD200 720-129366/6	01241316.D
Level 4	STD500 720-129366/7	01241317.D
Level 5	STD1000 720-129366/8	01241318.D
Level 6	STD2000 720-129366/9	01241319.D
Level 7	STD4000 720-129366/10	01241320.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
C6-C9	0.3683 0.2634	0.3253 0.2647	0.2981	0.2506	0.2612	Ave		0.2902				15.0		20.0			
C4-C10	1.7431 1.5966	1.7106 1.5747	1.6643	1.5303	1.6284	Ave		1.6354				4.6		20.0			
C6-C8	0.7752 0.7428	0.7641 0.7221	0.7617	0.7092	0.7663	Ave		0.7488				3.3		20.0			
Gasoline Range Organics (GRO)-C5-C12	1.9604 1.8347	1.9252 1.8039	1.8850	1.7531	1.8761	Ave		1.8626				3.8		20.0			
C4-C12	2.2337 2.1002	2.1766 2.0746	2.1409	1.9992	2.1462	Ave		2.1245				3.6		20.0			
C6-C10	1.3778 1.3372	1.3776 1.3102	1.3592	1.2852	1.3679	Ave		1.3450				2.7		20.0			
C6-C12	1.8684 1.8346	1.8445 1.8101	1.8452	1.7490	1.8856	Ave		1.8339				2.4		20.0			
C8-C10	0.5856 0.5737	0.5950 0.5667	0.5875	0.5570	0.5899	Ave		0.5793				2.4		20.0			
C7-C12	1.6245 1.6115	1.6088 1.5922	1.6161	1.5327	1.6564	Ave		1.6061				2.4		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.



FORM VI  
GC/MS VOA INITIAL CALIBRATION DATA  
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Pleasanton Job No.: 720-47852-1 Analy Batch No.: 129366

SDG No.: \_\_\_\_\_

Instrument ID: HP12 GC Column: DB-VRX ID: 250(um) Heated Purge: (Y/N) N

Calibration Start Date: 01/24/2013 10:52 Calibration End Date: 01/24/2013 13:43 Calibration ID: 17560

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD50 720-129366/4	01241314.D
Level 2	STD100 720-129366/5	01241315.D
Level 3	STD200 720-129366/6	01241316.D
Level 4	STD500 720-129366/7	01241317.D
Level 5	STD1000 720-129366/8	01241318.D
Level 6	STD2000 720-129366/9	01241319.D
Level 7	STD4000 720-129366/10	01241320.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
C6-C9	FB	Ave	1157193 34109390	2165108 70651321	3846583	8128636	16413166	50.0 2000	100 4000	200	500	1000
C4-C10	FB	Ave	5477004 206742227	11384924 420354180	21479296	49641413	102313113	50.0 2000	100 4000	200	500	1000
C6-C8	FB	Ave	2435850 96183942	5085622 192767976	9830465	23006413	48149107	50.0 2000	100 4000	200	500	1000
Gasoline Range Organics (GRO)-C5-C12	FB	Ave	6159892 237571192	12813067 481537915	24327351	56867733	117874080	50.0 2000	100 4000	200	500	1000
C4-C12	FB	Ave	7018642 271946824	14486724 553811237	27629980	64851236	134849056	50.0 2000	100 4000	200	500	1000
C6-C10	FB	Ave	4329311 173155500	9168713 349741038	17540779	41688474	85947616	50.0 2000	100 4000	200	500	1000
C6-C12	FB	Ave	5870949 237554248	12276414 483198095	23813481	56733668	118473689	50.0 2000	100 4000	200	500	1000
C8-C10	FB	Ave	1840153 74280852	3959975 151273686	7581781	18069042	37064912	50.0 2000	100 4000	200	500	1000
C7-C12	FB	Ave	5104460 208674983	10707706 425031522	20856639	49718790	104074762	50.0 2000	100 4000	200	500	1000

Curve Type Legend:

Ave = Average ISTD

FORM VI  
GC/MS VOA INITIAL CALIBRATION DATA  
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Pleasanton Job No.: 720-47852-1 Analy Batch No.: 130203

SDG No.: \_\_\_\_\_

Instrument ID: HP12 GC Column: DB-VRX ID: 250 (um) Heated Purge: (Y/N) N

Calibration Start Date: 02/06/2013 18:14 Calibration End Date: 02/06/2013 23:00 Calibration ID: 17714

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD05 720-130203/7	02061307.D
Level 2	STD1 720-130203/8	02061308.D
Level 3	STD01 720-130203/5	02061305.D
Level 4	STD2 720-130203/9	02061309.D
Level 5	STD02 720-130203/6	02061306.D
Level 6	STD5 720-130203/10	02061310.D
Level 7	STD10 720-130203/11	02061311.D
Level 8	STD20 720-130203/12	02061312.D
Level 9	STD50 720-130203/13	02061313.D
Level 10	STD100 720-130203/14	02061314.D
Level 11	STD200 720-130203/15	02061315.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7	LVL 8	LVL 9	LVL 10												
Dichlorodifluoromethane	0.4568 0.4651 ++++	0.4448 0.4517	0.4330	0.4596 0.4156	0.3882	Ave		0.4394				5.9		15.0			
Chloromethane	0.2714 0.2796 0.2575	0.2689 0.2705	0.2771	0.2880 0.2753	0.2694	Ave		0.2731			0.1000	3.1		15.0			
Isobutane	0.0948 0.1250 ++++	0.1367 0.1212	0.1214	0.0947 0.1181	0.1057	Ave		0.1147				13.0		15.0			
Vinyl chloride	0.2968 0.3047 0.2735	0.2811 0.3029	0.2896	0.3081 0.2898	0.2853	Ave		0.2924				4.0		30.0			
Butadiene	0.2571 0.2739 0.2628	0.2578 0.2732	0.2693	0.2667 0.2685	0.2705	Ave		0.2666				2.3		15.0			
Bromomethane	0.1987 0.2138 0.1928	0.1988 0.2034	0.2016	0.2077 0.2034	0.2009	Ave		0.2023				2.9		15.0			
Ethanol	0.1364 0.0870	0.1108	0.0962	0.0985	0.0940	Lin2	4.6235	0.0890							0.9980		0.9900
Chloroethane	0.1569 0.1655 0.1543	0.1520 0.1577	0.1555	0.1597 0.1545	0.1574	Ave		0.1571				2.5		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI  
GC/MS VOA INITIAL CALIBRATION DATA  
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Pleasanton Job No.: 720-47852-1 Analy Batch No.: 130203

SDG No.: \_\_\_\_\_

Instrument ID: HP12 GC Column: DB-VRX ID: 250(um) Heated Purge: (Y/N) N

Calibration Start Date: 02/06/2013 18:14 Calibration End Date: 02/06/2013 23:00 Calibration ID: 17714

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6 LVL 11	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Acrylonitrile	0.0407 0.0542 +++++	+++++ 0.0545	0.0480	0.0463 0.0520	0.0549	None											
Acrolein	0.5720 1.2013 1.2735	0.9537 1.1836	1.2662	1.0847 1.3071	1.2655	Lin2	-0.346	1.2726							0.9990		0.9900
Acetonitrile	0.0211 0.0104 0.0083	0.0121 0.0095	0.0080	0.0118 0.0077	0.0083	Lin1	0.0615	0.0081							0.9980		0.9900
Isopropyl alcohol	0.7191 0.6268 0.5597	0.6622 0.6000	0.5405	0.6588 0.5789	0.5861	Lin2	0.7567	0.5820							0.9970		0.9900
Trichlorofluoromethane	0.4912 0.5947 0.5095	0.5092 0.5828	0.5662	0.5554 0.5558	0.5405	Ave		0.5450				6.5		15.0			
Acetone	0.0170 0.0133	0.0156	0.0132	0.0130	0.0135	Ave		0.0143				11.0		15.0			
Diethyl ether	0.1441 0.1530 0.1522	0.1373 0.1558	0.1456	0.1487 0.1501	0.1531	Ave		0.1489				3.8		15.0			
2-Chloropropane	0.0537 +++++	0.0432 0.0530	0.0486	0.0505 0.0524	0.0546	None											
1,1-Dichloroethene	0.2487 0.2618 0.2484	0.2468 0.2533	0.2355	0.2614 0.2473	0.2531	Ave		0.2507				3.2		30.0			
TBA	1.2715 1.2134 1.2634	1.1491 1.2214	1.0815	1.2638 1.2724	1.4257 1.2841	Ave		1.2446				7.3		15.0			
Iodomethane	0.4176 0.4534 0.4188	0.4015 0.4375	0.4278	0.4348 0.4317	0.4330	Ave		0.4285				3.4		15.0			
Methylene Chloride	0.3019 0.2392	0.2696	0.2325	0.2419	0.2433	Ave		0.2547				10.0		15.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2717 0.2760 0.2452	0.2529 0.2676	0.2400	0.2754 0.2538	0.2537	Ave		0.2596				5.2		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI  
GC/MS VOA INITIAL CALIBRATION DATA  
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Pleasanton Job No.: 720-47852-1 Analy Batch No.: 130203

SDG No.: \_\_\_\_\_

Instrument ID: HP12 GC Column: DB-VRX ID: 250(um) Heated Purge: (Y/N) N

Calibration Start Date: 02/06/2013 18:14 Calibration End Date: 02/06/2013 23:00 Calibration ID: 17714

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6 LVL 11	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
3-Chloro-1-propene	0.0969 0.1142 0.1211	0.0912 0.1168	0.1092	0.1058 0.1194	0.1223	Ave		0.1108				9.9		15.0			
Carbon disulfide	0.5083 0.6284 0.6623	0.4929 0.6288	0.6274	0.5741 0.6466	0.6655	Ave		0.6038				11.0		15.0			
trans-1,2-Dichloroethene	0.2623 0.2607 0.2443	0.2438 0.2528	0.2321	0.2495 0.2485	0.2503	Ave		0.2494				3.7		15.0			
Methyl tert-butyl ether	0.5940 0.6397 0.6293	0.5744 0.6362	0.5621	0.6084 0.6295	0.6360	Ave		0.6122				4.8		15.0			
1,1-Dichloroethane	0.3965 0.4339 0.4008	0.3946 0.4187	0.3834	0.4281 0.4139	0.4150	Ave		0.4094			0.1000	4.1		15.0			
Propionitrile	0.0181 0.0201 0.0209	0.0182 0.0207	0.0180	0.0191 0.0195	0.0203	Ave		0.0194				5.9		15.0			
Vinyl acetate	0.3018 0.3334	0.3040	0.3175	0.2627 0.3023	0.2923	Ave		0.3020				7.2		15.0			
2-Chloro-1,3-butadiene	0.3848 0.4568 0.4251	0.3943 0.4609	0.4286	0.4266 0.4550	0.4507	Ave		0.4314				6.4		15.0			
Hexane	0.3330 0.3359 0.3102	0.3156 0.3353	0.3260	0.3318 0.3227	0.3212	Ave		0.3257				2.8		15.0			
2-Butanone (MEK)	0.0202 0.0193	0.0203	0.0187	0.0187	0.0191	Ave		0.0194				3.6		15.0			
DIPE	0.6644 0.7001 0.6508	0.6441 0.6903	0.6146	0.6694 0.6789	0.6754	Ave		0.6653				3.9		15.0			
Methacrylonitrile	0.0452 0.0559 0.0637	0.0471 0.0586	0.0533	0.0534 0.0584	0.0607	Ave		0.0551				11.0		15.0			
cis-1,2-Dichloroethene	0.3198 0.3375 0.3141	0.3070 0.3311	0.3020	0.3296 0.3276	0.3252	Ave		0.3215				3.7		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI  
GC/MS VOA INITIAL CALIBRATION DATA  
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Pleasanton Job No.: 720-47852-1 Analy Batch No.: 130203

SDG No.: \_\_\_\_\_

Instrument ID: HP12 GC Column: DB-VRX ID: 250 (um) Heated Purge: (Y/N) N

Calibration Start Date: 02/06/2013 18:14 Calibration End Date: 02/06/2013 23:00 Calibration ID: 17714

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6 LVL 11	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Chlorobromomethane	0.1527 0.1751 0.1662	0.1590 0.1725	0.1558	0.1674 0.1714	0.1696	Ave		0.1655				4.8		15.0			
Chloroform	0.4386 0.4946 0.4415	0.4310 0.4808	0.4378	0.4716 0.4739	0.4630	Ave		0.4592				4.9		30.0			
Ethyl tert-butyl ether	0.6245 0.6941 0.6961	0.5983 0.6936	0.6202	0.6649 0.7066	0.7064	Ave		0.6672				6.3		15.0			
Isobutyl alcohol	0.7571 0.8797 0.8577	0.7498 0.8700	0.8211	0.8956 0.9324	0.9122	Ave		0.8528				7.6		15.0			
2,2-Dichloropropane	0.1888 0.2248 0.1812	0.1887 0.2334	0.2067	0.2177 0.2127	0.2052	Lin2	-0.011	0.2115							0.9930		0.9900
Tetrahydrofuran	0.0454 0.0504	0.0482 0.0468	0.0406	0.0444 0.0453	0.0474	Ave		0.0461				6.3		15.0			
1,2-Dichloroethane	0.3390 0.3565 0.3092	0.3362 0.3491	0.3128	0.3585 0.3383	0.3263	Ave		0.3362				5.2		15.0			
1,1,1-Trichloroethane	0.4046 0.4865 0.4601	0.4210 0.4920	0.4566	0.4610 0.4999	0.4896	Ave		0.4635				7.1		15.0			
1,1-Dichloropropene	0.3196 0.3447 0.3290	0.3172 0.3449	0.3172	0.3356 0.3435	0.3403	Ave		0.3324				3.6		15.0			
Carbon tetrachloride	0.3534 0.4345 0.4444	0.3571 0.4450	0.4278	0.3999 0.4805	0.4723	Ave		0.4239				11.0		15.0			
Benzene	0.9211 0.9426 0.8820	0.8693 0.9291	0.8445	0.9369 0.9210	0.9153	Ave		0.9069				3.7		15.0			
TAME	0.5403 0.5920 0.6273	0.5145 0.6033	0.5342	0.5566 0.6195	0.6315	Ave		0.5799				7.6		15.0			
Dibromomethane	0.1177 0.1278 0.1261	0.1186 0.1294	0.1156	0.1233 0.1280	0.1266	Ave		0.1237				4.1		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI  
GC/MS VOA INITIAL CALIBRATION DATA  
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Pleasanton Job No.: 720-47852-1 Analy Batch No.: 130203

SDG No.: \_\_\_\_\_

Instrument ID: HP12 GC Column: DB-VRX ID: 250 (um) Heated Purge: (Y/N) N

Calibration Start Date: 02/06/2013 18:14 Calibration End Date: 02/06/2013 23:00 Calibration ID: 17714

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6 LVL 11	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
1,2-Dichloropropane	0.1811 0.1951 0.1987	0.1804 0.1941	0.1772	0.1928 0.1983	0.1989	Ave		0.1907				4.6		30.0			
Trichloroethene	0.3071 0.3321 0.3002	0.3009 0.3280	0.2961	0.3239 0.3230	0.3183	Ave		0.3144				4.3		15.0			
Dichlorobromomethane	0.2410 0.3183 0.3395	0.2397 0.3251	0.3077	0.2843 0.3520	0.3484	Lin2	-0.056	0.3303						0.9950		0.9900	
Methyl methacrylate	0.0823 0.1112 0.1301	0.0926 0.1181	0.1062	0.0991 0.1213	0.1251	Ave		0.1096				15.0		15.0			
2-Chloroethyl vinyl ether	0.0822 0.1007	0.0706 0.0867	0.0840	0.0759 0.0936	0.0961	Lin2	-0.025	0.0921						0.9950		0.9900	
cis-1,3-Dichloropropene	0.2294 0.2884 0.3313	0.2327 0.3008	0.2838	0.2620 0.3266	0.3305	Lin2	-0.050	0.3087						0.9940		0.9900	
4-Methyl-2-pentanone (MIBK)	0.1674 0.1692	0.1783	0.1670	0.1703	0.1711	Ave		0.1705				2.4		15.0			
trans-1,3-Dichloropropene	0.2159 0.2813 0.3353	0.2161 0.2977	0.2809	0.2461 0.3306	0.3324	Lin2	-0.059	0.3071						0.9900		0.9900	
1,1,2-Trichloroethane	0.1293 0.1379 0.1428	0.1222 0.1362	0.1233	0.1286 0.1393	0.1400	Ave		0.1333				5.7		15.0			
Paraldehyde	0.0113 0.0163 0.0255	0.0128 0.0179	0.0164	0.0160 0.0201	0.0224	Qua2	-0.003	0.0170	0					0.9980		0.9900	
Toluene	0.8351 0.8210 0.6947	0.7851 0.8201	0.7343	0.8338 0.7708	0.7864	Ave		0.7868				6.1		30.0			
Ethyl methacrylate	0.1758 0.2243 0.2680	0.1818 0.2371	0.2154	0.1996 0.2516	0.2568	Ave		0.2234				15.0		15.0			
1,3-Dichloropropane	0.2772 0.3123 0.3046	0.2794 0.3077	0.2754	0.2959 0.3045	0.3035	Ave		0.2956				4.9		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI  
GC/MS VOA INITIAL CALIBRATION DATA  
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Pleasanton Job No.: 720-47852-1 Analy Batch No.: 130203

SDG No.: \_\_\_\_\_

Instrument ID: HP12 GC Column: DB-VRX ID: 250(um) Heated Purge: (Y/N) N

Calibration Start Date: 02/06/2013 18:14 Calibration End Date: 02/06/2013 23:00 Calibration ID: 17714

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6 LVL 11	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
2-Hexanone	0.1258 0.1314	0.1360	0.1250	0.1282	0.1302	Ave		0.1294				3.1		15.0			
Chlorodibromomethane	0.1501 0.2093 0.2763	0.1555 0.2257	0.2172	0.1784 0.2642	0.2712	Qua2	-0.043	0.2194	0.0004						0.9930		0.9900
Ethylene Dibromide	0.1628 0.1827 0.1961	0.1567 0.1851	0.1686	0.1655 0.1900	0.1915	Ave		0.1777				8.1		15.0			
Tetrachloroethene	0.2280 0.2375 0.2231	0.2187 0.2331	0.2121	0.2338 0.2312	0.2265	Ave		0.2271				3.5		15.0			
1,1,1,2-Tetrachloroethane	0.2390 0.3229 0.3302	0.2466 0.3359	0.3136	0.2932 0.3496	0.3689	Ave		0.3111				14.0		15.0			
Chlorobenzene	0.9803 0.9972 0.8501	0.9241 0.9937	0.8840	0.9928 0.9387	0.9536	Ave		0.9461			0.3000	5.5		15.0			
Butyl Ether	0.2475 0.2339 0.2242	0.2663 0.2320	0.2103	0.2271 0.2363	0.2440	Ave		0.2357				6.7		15.0			
Ethylbenzene	1.5633 1.6605 1.3566	1.5352 1.6682	1.5015	1.6483 1.5742	1.6016	Ave		1.5677				6.2		30.0			
m-Xylene & p-Xylene	1.2171 1.2983 ++++	1.1854 1.3010	1.1687	1.2729 1.2264	1.2581 1.2375	Ave		1.2406				3.7		15.0			
Bromoform	0.1067 0.1662	0.0784 0.1219	0.1193	0.0896 0.1500	0.1682	Qua2	-0.053	0.1247	0.0003		0.1000				0.9920		0.9900
Styrene	0.7724 0.9755 0.9242	0.8041 1.0018	0.9111	0.8839 0.9989	1.0320	Ave		0.9227				9.8		15.0			
1,1,2,2-Tetrachloroethane	0.3937 0.4583 0.5081	0.3947 0.4732	0.4337	0.4282 0.4638	0.4788	Ave		0.4480			0.3000	8.6		15.0			
o-Xylene	1.2069 1.3379 1.1288	1.1782 1.3335	1.1926	1.2925 1.2747	1.3049	Ave		1.2500				6.0		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI  
GC/MS VOA INITIAL CALIBRATION DATA  
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Pleasanton Job No.: 720-47852-1 Analy Batch No.: 130203

SDG No.: \_\_\_\_\_

Instrument ID: HP12 GC Column: DB-VRX ID: 250 (um) Heated Purge: (Y/N) N

Calibration Start Date: 02/06/2013 18:14 Calibration End Date: 02/06/2013 23:00 Calibration ID: 17714

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6 LVL 11	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
1,2,3-Trichloropropane	0.1705 0.1847 0.1903	0.1669 0.1888	0.1708	0.1767 0.1816	0.1870	Ave		0.1797				4.9		15.0			
trans-1,4-Dichloro-2-butene	0.0567 0.0721 0.0866	0.0570 0.0801	0.0731	0.0617 0.0850	0.0909	Qua2	-0.012	0.0753	0.0001					0.9930			0.9900
Isopropylbenzene	1.5936 1.8346 1.4301	1.6185 1.8499	1.6497	1.7690 1.7556	1.7847	Ave		1.6984				8.0		15.0			
Bromobenzene	0.6760 0.7351 0.7327	0.6628 0.7243	0.6722	0.7282 0.7243	0.7268	Ave		0.7092				4.2		15.0			
N-Propylbenzene	3.2660 3.7362 3.0898	3.3218 3.7526	3.4747	3.5898 3.7112	3.6345	Ave		3.5085				6.7		15.0			
2-Chlorotoluene	1.9913 2.2280 2.1068	2.0255 2.2099	2.0297	2.1533 2.1896	2.1913	Ave		2.1250				4.2		15.0			
4-Chlorotoluene	2.0648 2.2799 2.1499	2.0359 2.2652	2.0708	2.2065 2.2562	2.2357	Ave		2.1739				4.4		15.0			
1,3,5-Trimethylbenzene	2.4585 2.8666 2.6195	2.5013 2.8821	2.6600	2.7274 2.8940	2.8886	Ave		2.7220				6.3		15.0			
tert-Butylbenzene	2.4679 2.8308 2.4926	2.4814 2.8522	2.6272	2.7748 2.8215	2.7890	Ave		2.6819				6.1		15.0			
1,2,4-Trimethylbenzene	2.4095 2.8403 2.6035	2.5041 2.8999	2.6461	2.7630 2.8954	2.8469	Ave		2.7121				6.6		15.0			
sec-Butylbenzene	3.3763 3.8627 3.0507	3.3931 3.8683	3.5734	3.7953 3.8074	3.7383	Ave		3.6073				7.8		15.0			
1,3-Dichlorobenzene	1.5247 1.6187 1.5028	1.4527 1.5969	1.4448	1.5941 1.5652	1.5549	Ave		1.5394				4.1		15.0			
1,4-Dichlorobenzene	1.5926 1.6144 1.4629	1.5416 1.5876	1.4329	1.6148 1.5521	1.5393	Ave		1.5487				4.1		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.



FORM VI  
GC/MS VOA INITIAL CALIBRATION DATA  
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Pleasanton Job No.: 720-47852-1 Analy Batch No.: 130203

SDG No.: \_\_\_\_\_

Instrument ID: HP12 GC Column: DB-VRX ID: 250 (um) Heated Purge: (Y/N) N

Calibration Start Date: 02/06/2013 18:14 Calibration End Date: 02/06/2013 23:00 Calibration ID: 17714

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6 LVL 11	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
4-Isopropyltoluene	3.2953 3.6047 2.8671	3.2437 3.6145	3.2997	3.5251 3.5569	3.4747	Ave		3.3869				7.1		15.0			
1,2-Dichlorobenzene	1.4635 1.4827 1.3678	1.3926 1.4545	1.3280	1.4903 1.4133	1.4297	Ave		1.4247				3.8		15.0			
n-Butylbenzene	2.5129 2.8465 2.4441	2.6064 2.8516	2.5965	2.7729 2.8075	2.7332	Ave		2.6857				5.6		15.0			
1,2-Dibromo-3-Chloropropane	0.0898 0.1348	0.0708 0.1045	0.0980	0.0777 0.1070	0.1260	Qua2	-0.031	0.0989	0.0002						0.9970		0.9900
Hexachloroethane	0.3110 0.4291 0.6279	0.3138 0.4849	0.4905	0.3788 0.5737	0.6452	Qua2	-0.102	0.4728	0.0010						0.9900		0.9900
1,2,4-Trichlorobenzene	0.8523 0.9043 0.7787	0.8560 0.9179	0.7803	0.8825 0.8163	0.8060	Ave		0.8438				6.1		15.0			
Naphthalene	2.0504 2.3023 2.0757	2.0735 2.4375	2.1251	2.1782 2.0874	2.1615	Ave		2.1657				5.9		15.0			
Hexachlorobutadiene	0.4791 0.4908 0.4220	0.4489 0.4892	0.4269	0.4963 0.4199	0.4288	Ave		0.4558				7.2		15.0			
1,2,3-Trichlorobenzene	0.8114 0.8307 ++++	0.7939 0.8286	0.7129	0.8213 0.6914	0.6602	Ave		0.7688				9.0		15.0			
Dibromofluoromethane (Surr)	0.2598 0.2599 0.2631	0.2773 0.2723	0.2504 0.2723	0.2752 0.2714	0.2575 0.2686	Ave		0.2662				3.2		15.0			
1,2-Dichloroethane-d4 (Surr)	0.3070 0.2931 0.2708	0.3196 0.3055	0.2953 0.3000	0.3102 0.3011	0.2958 0.2816	Ave		0.2982				4.5		15.0			
1,4-Difluorobenzene	0.9135 0.8789 0.9090	0.9480 0.9148	0.9163 0.9209	0.9239 0.9162	0.9241 0.9100	Ave		0.9160				1.8		15.0			
Toluene-d8 (Surr)	0.9735 0.9549 1.0252	1.0203 1.0075	0.9526 1.0111	0.9962 1.0263	0.9728 1.0146	Ave		0.9959				2.8		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI  
GC/MS VOA INITIAL CALIBRATION DATA  
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Pleasanton Job No.: 720-47852-1 Analy Batch No.: 130203

SDG No.: \_\_\_\_\_

Instrument ID: HP12 GC Column: DB-VRX ID: 250 (um) Heated Purge: (Y/N) N

Calibration Start Date: 02/06/2013 18:14 Calibration End Date: 02/06/2013 23:00 Calibration ID: 17714

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7	LVL 8	LVL 9	LVL 10												
4-Bromofluorobenzene	0.4549 0.4458 0.4434	0.4729 0.4691	0.4392 0.4614	0.4674 0.4588	0.4598 0.4685	Ave		0.4583				2.5		15.0			
1,2-Dichlorobenzene-d4	0.8704 0.8563 0.8925	0.9045 0.9094	0.8975 0.9079	0.8927 0.8861	0.9054 0.9040	Ave		0.8933				1.9		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI  
GC/MS VOA INITIAL CALIBRATION DATA  
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Pleasanton Job No.: 720-47852-1 Analy Batch No.: 130203

SDG No.: \_\_\_\_\_

Instrument ID: HP12 GC Column: DB-VRX ID: 250(um) Heated Purge: (Y/N) N

Calibration Start Date: 02/06/2013 18:14 Calibration End Date: 02/06/2013 23:00 Calibration ID: 17714

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD05 720-130203/7	02061307.D
Level 2	STD1 720-130203/8	02061308.D
Level 3	STD01 720-130203/5	02061305.D
Level 4	STD2 720-130203/9	02061309.D
Level 5	STD02 720-130203/6	02061306.D
Level 6	STD5 720-130203/10	02061310.D
Level 7	STD10 720-130203/11	02061311.D
Level 8	STD20 720-130203/12	02061312.D
Level 9	STD50 720-130203/13	02061313.D
Level 10	STD100 720-130203/14	02061314.D
Level 11	STD200 720-130203/15	02061315.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5
			LVL 6	LVL 7	LVL 8	LVL 9	LVL 10	LVL 6	LVL 7	LVL 8	LVL 9	LVL 10
Dichlorodifluoromethane	FB	Ave	11735 118475 ++++	22364 239538	461031	46686 1222632	2548749	0.500 5.00 ++++	1.00 10.0	20.0	2.00 50.0	100
Chloromethane	FB	Ave	6971 71215 3816792	13522 143438	295089	29255 809719	1768835	0.500 5.00 200	1.00 10.0	20.0	2.00 50.0	100
Isobutane	FB	Ave	2435 31854 ++++	6871 64256	129225	9624 347290	694099	0.500 5.00 ++++	1.00 10.0	20.0	2.00 50.0	100
Vinyl chloride	FB	Ave	7624 77620 4054554	14135 160604	308342	31298 852587	1872799	0.500 5.00 200	1.00 10.0	20.0	2.00 50.0	100
Butadiene	FB	Ave	6604 69766 3895187	12961 144869	286748	27089 789948	1775608	0.500 5.00 200	1.00 10.0	20.0	2.00 50.0	100
Bromomethane	FB	Ave	5103 54460 2857467	9997 107848	214623	21093 598360	1319146	0.500 5.00 200	1.00 10.0	20.0	2.00 50.0	100
Ethanol	TBA	Lin2	13094 504653	22713	37552	102731	227780	100 4000	200	400	1000	2000
Chloroethane	FB	Ave	4030 42151 2288025	7643 83616	165596	16223 454475	1033001	0.500 5.00 200	1.00 10.0	20.0	2.00 50.0	100

FORM VI  
GC/MS VOA INITIAL CALIBRATION DATA  
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Pleasanton Job No.: 720-47852-1 Analy Batch No.: 130203

SDG No.: \_\_\_\_\_

Instrument ID: HP12 GC Column: DB-VRX ID: 250(um) Heated Purge: (Y/N) N

Calibration Start Date: 02/06/2013 18:14 Calibration End Date: 02/06/2013 23:00 Calibration ID: 17714

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6 LVL 11	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6 LVL 11	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
Acrylonitrile	FB	None	1046 13803 ++++	++++ 28922	51108	4703 152917	360671	0.500 5.00 ++++	++++ 10.0	20.0	2.00 50.0	100
Acrolein	TBA	Lin2	275 5766 369363	938 12133	24709	1927 68163	153375	0.500 5.00 200	1.00 10.0	20.0	2.00 50.0	100
Acetonitrile	FB	Lin1	5429 26398 1223015	6103 50265	84951	11942 226324	543514	5.00 50.0 2000	10.0 100	200	20.0 500	1000
Isopropyl alcohol	TBA	Lin2	3457 30083 1623453	6513 61509	105484	11704 301865	710317	5.00 50.0 2000	10.0 100	200	20.0 500	1000
Trichlorofluoromethane	FB	Ave	12618 151497 7552868	25605 309055	602911	56409 1634920	3548276	0.500 5.00 200	1.00 10.0	20.0	2.00 50.0	100
Acetone	FB	Ave	21658 987802	41266	70349	190730	443436	25.0 1000	50.0	100	250	500
Diethyl ether	FB	Ave	3702 38981 2255739	6902 82610	155046	15108 441451	1004778	0.500 5.00 200	1.00 10.0	20.0	2.00 50.0	100
2-Chloropropane	FB	None	13689 ++++	2173 28088	51716	5134 154071	358401	5.00 ++++	1.00 10.0	20.0	2.00 50.0	100
1,1-Dichloroethene	FB	Ave	6388 66689 3682359	12409 134306	250813	26555 727434	1661730	0.500 5.00 200	1.00 10.0	20.0	2.00 50.0	100
TBA	TBA	Ave	12226 116478 7328664	22603 250399	422095	44905 1327056	5159 3112405	10.0 100 4000	20.0 200	400	40.0 1000	4.00 2000
Iodomethane	FB	Ave	10728 115497 6208178	20188 231982	455569	44163 1269965	2842300	0.500 5.00 200	1.00 10.0	20.0	2.00 50.0	100
Methylene Chloride	FB	Ave	76912 3545492	142970	247580	711582	1597481	5.00 200	10.0	20.0	50.0	100
1,1,2-Trichloro-1,2,2-trifluoroethane	FB	Ave	6979 70313 3635022	12718 141894	255512	27971 746559	1665580	0.500 5.00 200	1.00 10.0	20.0	2.00 50.0	100

FORM VI  
GC/MS VOA INITIAL CALIBRATION DATA  
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Pleasanton Job No.: 720-47852-1 Analy Batch No.: 130203

SDG No.: \_\_\_\_\_

Instrument ID: HP12 GC Column: DB-VRX ID: 250(um) Heated Purge: (Y/N) N

Calibration Start Date: 02/06/2013 18:14 Calibration End Date: 02/06/2013 23:00 Calibration ID: 17714

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6 LVL 11	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6 LVL 11	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
3-Chloro-1-propene	FB	Ave	2488 29104 1794564	4585 61960	116299	10748 351230	802808	0.500 5.00 200	1.00 10.0	20.0	2.00 50.0	100
Carbon disulfide	FB	Ave	13058 160090 9817662	24781 333432	668062	58311 1902210	4368796	0.500 5.00 200	1.00 10.0	20.0	2.00 50.0	100
trans-1,2-Dichloroethene	FB	Ave	6739 66410 3620977	12257 134075	247132	25343 730966	1643086	0.500 5.00 200	1.00 10.0	20.0	2.00 50.0	100
Methyl tert-butyl ether	FB	Ave	15258 162969 9329644	28879 337373	598477	61802 1851810	4175329	0.500 5.00 200	1.00 10.0	20.0	2.00 50.0	100
1,1-Dichloroethane	FB	Ave	10185 110530 5941512	19843 222036	408210	43483 1217597	2724361	0.500 5.00 200	1.00 10.0	20.0	2.00 50.0	100
Propionitrile	FB	Ave	4638 51243 3100455	9156 109504	191713	19397 574290	1334653	5.00 50.0 2000	10.0 100	200	20.0 500	1000
Vinyl acetate	FB	Ave	76877 4943172	161223	338088	26681 889341	1918709	5.00 200	10.0	20.0	2.00 50.0	100
2-Chloro-1,3-butadiene	FB	Ave	9884 116378 6301571	19827 244384	456371	43331 1338555	2958922	0.500 5.00 200	1.00 10.0	20.0	2.00 50.0	100
Hexane	FB	Ave	8554 85570 4598769	15866 177780	347103	33697 949285	2108804	0.500 5.00 200	1.00 10.0	20.0	2.00 50.0	100
2-Butanone (MEK)	FB	Ave	25711 1428347	53699	99620	275026	626071	25.0 1000	50.0	100	250	500
DIPE	FB	Ave	17068 178353 9648157	32386 366053	654461	67991 1996957	4433834	0.500 5.00 200	1.00 10.0	20.0	2.00 50.0	100
Methacrylonitrile	FB	Ave	1160 14244 944911	2367 31084	56701	5425 171812	398600	0.500 5.00 200	1.00 10.0	20.0	2.00 50.0	100
cis-1,2-Dichloroethene	FB	Ave	8216 85970 4656498	15438 175589	321524	33474 963582	2135065	0.500 5.00 200	1.00 10.0	20.0	2.00 50.0	100

FORM VI  
GC/MS VOA INITIAL CALIBRATION DATA  
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Pleasanton Job No.: 720-47852-1 Analy Batch No.: 130203

SDG No.: \_\_\_\_\_

Instrument ID: HP12 GC Column: DB-VRX ID: 250(um) Heated Purge: (Y/N) N

Calibration Start Date: 02/06/2013 18:14 Calibration End Date: 02/06/2013 23:00 Calibration ID: 17714

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6 LVL 11	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6 LVL 11	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
Chlorobromomethane	FB	Ave	3923 44602 2463938	7995 91473	165852	17001 504054	1113347	0.500 5.00 200	1.00 10.0	20.0	2.00 50.0	100
Chloroform	FB	Ave	11267 125998 6545492	21669 254928	466157	47897 1394066	3039379	0.500 5.00 200	1.00 10.0	20.0	2.00 50.0	100
Ethyl tert-butyl ether	FB	Ave	16043 176812 10319224	30083 367771	660346	67540 2078525	4637633	0.500 5.00 200	1.00 10.0	20.0	2.00 50.0	100
Isobutyl alcohol	TBA	Ave	3640 42222 2487657	7374 89177	160236	15910 486234	1105499	5.00 50.0 2000	10.0 100	200	20.0 500	1000
2,2-Dichloropropane	FB	Lin2	4850 57271 2686198	9488 123780	220082	22115 625787	1347271	0.500 5.00 200	1.00 10.0	20.0	2.00 50.0	100
Tetrahydrofuran	FB	Ave	11557 746869	2423 24838	43232	4510 133230	310922	5.00 200	1.00 10.0	20.0	2.00 50.0	100
1,2-Dichloroethane	FB	Ave	8707 90812 4583331	16903 185108	333028	36419 995237	2141916	0.500 5.00 200	1.00 10.0	20.0	2.00 50.0	100
1,1,1-Trichloroethane	FB	Ave	10394 123940 6821322	21169 260882	486153	46826 1470580	3214107	0.500 5.00 200	1.00 10.0	20.0	2.00 50.0	100
1,1-Dichloropropene	FB	Ave	8210 87819 4876628	15947 182864	337791	34089 1010455	2233936	0.500 5.00 200	1.00 10.0	20.0	2.00 50.0	100
Carbon tetrachloride	FB	Ave	9079 110692 6587881	17956 235981	455556	40618 1413345	3100727	0.500 5.00 200	1.00 10.0	20.0	2.00 50.0	100
Benzene	FB	Ave	23661 240133 13074511	43707 492680	899192	95160 2709212	6008953	0.500 5.00 200	1.00 10.0	20.0	2.00 50.0	100
TAME	FB	Ave	13879 150803 9299528	25868 319935	568808	56536 1822262	4145834	0.500 5.00 200	1.00 10.0	20.0	2.00 50.0	100
Dibromomethane	FB	Ave	3024 32568 1869254	5965 68634	123056	12523 376390	831393	0.500 5.00 200	1.00 10.0	20.0	2.00 50.0	100

FORM VI  
GC/MS VOA INITIAL CALIBRATION DATA  
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Pleasanton Job No.: 720-47852-1 Analy Batch No.: 130203

SDG No.: \_\_\_\_\_

Instrument ID: HP12 GC Column: DB-VRX ID: 250(um) Heated Purge: (Y/N) N

Calibration Start Date: 02/06/2013 18:14 Calibration End Date: 02/06/2013 23:00 Calibration ID: 17714

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6 LVL 11	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6 LVL 11	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
1,2-Dichloropropane	FB	Ave	4651 49702 2945634	9073 102905	188685	19580 583421	1305778	0.500 5.00 200	1.00 10.0	20.0	2.00 50.0	100
Trichloroethene	FB	Ave	7890 84610 4449991	15131 173910	315287	32902 950053	2089722	0.500 5.00 200	1.00 10.0	20.0	2.00 50.0	100
Dichlorobromomethane	FB	Lin2	6190 81081 5032474	12050 172406	327686	28880 1035336	2287433	0.500 5.00 200	1.00 10.0	20.0	2.00 50.0	100
Methyl methacrylate	FB	Ave	2114 28324 1928002	4656 62634	113068	10067 356800	821377	0.500 5.00 200	1.00 10.0	20.0	2.00 50.0	100
2-Chloroethyl vinyl ether	FB	Lin2	20950 1492749	3552 45951	89457	7709 275228	631159	5.00 200	1.00 10.0	20.0	2.00 50.0	100
cis-1,3-Dichloropropene	FB	Lin2	5892 73460 4911181	11699 159518	302189	26610 960736	2169733	0.500 5.00 200	1.00 10.0	20.0	2.00 50.0	100
4-Methyl-2-pentanone (MIBK)	FB	Ave	213200 12540665	472822	888893	2505079	5616465	25.0 1000	50.0	100	250	500
trans-1,3-Dichloropropene	FB	Lin2	5545 71655 4970350	10867 157868	299092	24999 972527	2181845	0.500 5.00 200	1.00 10.0	20.0	2.00 50.0	100
1,1,2-Trichloroethane	FB	Ave	3322 35123 2116405	6146 72197	131324	13058 409807	919274	0.500 5.00 200	1.00 10.0	20.0	2.00 50.0	100
Paraldehyde	FB	Qua2	290 4156 378068	642 9503	17475	1624 58984	147372	0.500 5.00 200	1.00 10.0	20.0	2.00 50.0	100
Toluene	CBZ	Ave	16911 169625 9276263	31378 347981	630827	67084 1917948	4218023	0.500 5.00 200	1.00 10.0	20.0	2.00 50.0	100
Ethyl methacrylate	FB	Ave	4515 57134 3972298	9140 125729	229344	20277 740147	1685869	0.500 5.00 200	1.00 10.0	20.0	2.00 50.0	100
1,3-Dichloropropane	FB	Ave	7121 79562 4515103	14048 163183	293241	30054 895678	1992677	0.500 5.00 200	1.00 10.0	20.0	2.00 50.0	100

FORM VI  
GC/MS VOA INITIAL CALIBRATION DATA  
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Pleasanton Job No.: 720-47852-1 Analy Batch No.: 130203

SDG No.: \_\_\_\_\_

Instrument ID: HP12 GC Column: DB-VRX ID: 250(um) Heated Purge: (Y/N) N

Calibration Start Date: 02/06/2013 18:14 Calibration End Date: 02/06/2013 23:00 Calibration ID: 17714

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6 LVL 11	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 6 LVL 11	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
2-Hexanone	FB	Ave	160232 9741253	360567	665703	1885484	4272301	25.0 1000	50.0	100	250	500
Chlorodibromomethane	FB	Qua2	3856 53308 4095550	7819 119689	231281	18121 777129	1780246	0.500 5.00 200	1.00 10.0	20.0	2.00 50.0	100
Ethylene Dibromide	FB	Ave	4183 46553 2906555	7880 98171	179475	16808 558922	1256904	0.500 5.00 200	1.00 10.0	20.0	2.00 50.0	100
Tetrachloroethene	FB	Ave	5857 60505 3307949	10998 123616	225802	23749 680199	1486839	0.500 5.00 200	1.00 10.0	20.0	2.00 50.0	100
1,1,1,2-Tetrachloroethane	CBZ	Ave	4841 66704 4409285	9857 142538	269435	23587 869822	1978525	0.500 5.00 200	1.00 10.0	20.0	2.00 50.0	100
Chlorobenzene	CBZ	Ave	19852 206019 11351682	36934 421638	759467	79875 2335790	5115085	0.500 5.00 200	1.00 10.0	20.0	2.00 50.0	100
Butyl Ether	CBZ	Ave	5013 48317 2993645	10644 98449	180710	18274 587899	1308723	0.500 5.00 200	1.00 10.0	20.0	2.00 50.0	100
Ethylbenzene	CBZ	Ave	31658 343057 18113782	61357 707853	1289974	132613 3917126	8590410	0.500 5.00 200	1.00 10.0	20.0	2.00 50.0	100
m-Xylene & p-Xylene	CBZ	Ave	49296 536454 +++++	94754 1104070	2008108	204812 6103526	20540 13275156	1.00 10.0 +++++	2.00 20.0	40.0	4.00 100	0.400 200
Bromoform	CBZ	Qua2	22049 2218594	3132 51713	102534	7206 373282	902048	5.00 200	1.00 10.0	20.0	2.00 50.0	100
Styrene	CBZ	Ave	15643 201545 12340775	32138 425080	782750	71116 2485535	5535615	0.500 5.00 200	1.00 10.0	20.0	2.00 50.0	100
1,1,2,2-Tetrachloroethane	DCB	Ave	4225 50237 3272426	8313 107928	190614	18086 592881	1356642	0.500 5.00 200	1.00 10.0	20.0	2.00 50.0	100
o-Xylene	CBZ	Ave	24441 276425 15072726	47086 565824	1024630	103984 3171949	6998973	0.500 5.00 200	1.00 10.0	20.0	2.00 50.0	100



FORM VI  
GC/MS VOA INITIAL CALIBRATION DATA  
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Pleasanton Job No.: 720-47852-1 Analy Batch No.: 130203

SDG No.: \_\_\_\_\_

Instrument ID: HP12 GC Column: DB-VRX ID: 250(um) Heated Purge: (Y/N) N

Calibration Start Date: 02/06/2013 18:14 Calibration End Date: 02/06/2013 23:00 Calibration ID: 17714

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6 LVL 11	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6 LVL 11	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
1,2,3-Trichloropropane	DCB	Ave	1830 20248 1225496	3515 43069	75044	7465 232154	529847	0.500 5.00 200	1.00 10.0	20.0	2.00 50.0	100
trans-1,4-Dichloro-2-butene	CBZ	Qua2	1148 14903 1156240	2279 33996	62800	4965 211540	487770	0.500 5.00 200	1.00 10.0	20.0	2.00 50.0	100
Isopropylbenzene	CBZ	Ave	32272 379038 19095683	64686 784941	1417345	142326 4368582	9572918	0.500 5.00 200	1.00 10.0	20.0	2.00 50.0	100
Bromobenzene	DCB	Ave	7255 80571 4719585	13960 165178	295408	30757 925928	2059567	0.500 5.00 200	1.00 10.0	20.0	2.00 50.0	100
N-Propylbenzene	DCB	Ave	35052 409524 19901518	69961 855838	1527073	151633 4744244	10298828	0.500 5.00 200	1.00 10.0	20.0	2.00 50.0	100
2-Chlorotoluene	DCB	Ave	21371 244212 13569630	42659 504009	892032	90955 2799139	6209375	0.500 5.00 200	1.00 10.0	20.0	2.00 50.0	100
4-Chlorotoluene	DCB	Ave	22160 249899 13847579	42879 516606	910101	93203 2884262	6335089	0.500 5.00 200	1.00 10.0	20.0	2.00 50.0	100
1,3,5-Trimethylbenzene	DCB	Ave	26385 314209 16871797	52680 657307	1169034	115206 3699572	8185295	0.500 5.00 200	1.00 10.0	20.0	2.00 50.0	100
tert-Butylbenzene	DCB	Ave	26486 310285 16054964	52261 650487	1154634	117208 3606944	7903086	0.500 5.00 200	1.00 10.0	20.0	2.00 50.0	100
1,2,4-Trimethylbenzene	DCB	Ave	25859 311324 16769057	52738 661369	1162947	116708 3701403	8066978	0.500 5.00 200	1.00 10.0	20.0	2.00 50.0	100
sec-Butylbenzene	DCB	Ave	36235 423389 19649697	71463 882227	1570474	160315 4867236	10592909	0.500 5.00 200	1.00 10.0	20.0	2.00 50.0	100
1,3-Dichlorobenzene	DCB	Ave	16363 177427 9679356	30595 364199	634952	67333 2000949	4405909	0.500 5.00 200	1.00 10.0	20.0	2.00 50.0	100
1,4-Dichlorobenzene	DCB	Ave	17092 176959 9422624	32468 362076	629765	68211 1984183	4361763	0.500 5.00 200	1.00 10.0	20.0	2.00 50.0	100

FORM VI  
GC/MS VOA INITIAL CALIBRATION DATA  
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Pleasanton Job No.: 720-47852-1 Analy Batch No.: 130203

SDG No.: \_\_\_\_\_

Instrument ID: HP12 GC Column: DB-VRX ID: 250(um) Heated Purge: (Y/N) N

Calibration Start Date: 02/06/2013 18:14 Calibration End Date: 02/06/2013 23:00 Calibration ID: 17714

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6 LVL 11	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6 LVL 11	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
4-Isopropyltoluene	DCB	Ave	35366 395115 18466629	68316 824339	1450190	148899 4547010	9846157	0.500 5.00 200	1.00 10.0	20.0	2.00 50.0	100
1,2-Dichlorobenzene	DCB	Ave	15707 162521 8810230	29330 331718	583623	62950 1806643	4051308	0.500 5.00 200	1.00 10.0	20.0	2.00 50.0	100
n-Butylbenzene	DCB	Ave	26969 312003 15742324	54893 650359	1141126	117128 3588955	7744871	0.500 5.00 200	1.00 10.0	20.0	2.00 50.0	100
1,2-Dibromo-3-Chloropropane	DCB	Qua2	9840 868489	1492 23824	43051	3281 136757	357000	5.00 200	1.00 10.0	20.0	2.00 50.0	100
Hexachloroethane	DCB	Qua2	3338 47035 4044587	6608 110578	215557	16000 733344	1828247	0.500 5.00 200	1.00 10.0	20.0	2.00 50.0	100
1,2,4-Trichlorobenzene	DCB	Ave	9147 99123 5015570	18029 209331	342930	37277 1043552	2283912	0.500 5.00 200	1.00 10.0	20.0	2.00 50.0	100
Naphthalene	DCB	Ave	22005 252356 13369549	43669 555905	933974	92009 2668434	6124968	0.500 5.00 200	1.00 10.0	20.0	2.00 50.0	100
Hexachlorobutadiene	DCB	Ave	5142 53796 2718296	9455 111560	187596	20964 536819	1214977	0.500 5.00 200	1.00 10.0	20.0	2.00 50.0	100
1,2,3-Trichlorobenzene	DCB	Ave	8708 91058 +++++	16721 188976	313297	34693 883908	1870726	0.500 5.00 +++++	1.00 10.0	20.0	2.00 50.0	100
Dibromofluoromethane (Surr)	FB	Ave	100094 99318 146274	139424 108295	25151 108749	209620 119736	66745 132233	7.50 7.50 7.50	10.0 7.50	2.00 7.50	15.0 7.50	5.00 7.50
1,2-Dichloroethane-d4 (Surr)	FB	Ave	118310 112007 150562	160702 121498	29656 119804	236283 132854	76686 138667	7.50 7.50 7.50	10.0 7.50	2.00 7.50	15.0 7.50	5.00 7.50
1,4-Difluorobenzene	FB	Ave	281581 268677 404255	381312 291066	73622 294162	563070 323400	191649 358436	6.00 6.00 6.00	8.00 6.00	1.60 6.00	12.0 6.00	4.00 6.00
Toluene-d8 (Surr)	FB	Ave	375112 364881 569894	512999 400667	95673 403752	758869 452831	252182 499571	7.50 7.50 7.50	10.0 7.50	2.00 7.50	15.0 7.50	5.00 7.50

FORM VI  
GC/MS VOA INITIAL CALIBRATION DATA  
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Pleasanton Job No.: 720-47852-1 Analy Batch No.: 130203

SDG No.: \_\_\_\_\_

Instrument ID: HP12 GC Column: DB-VRX ID: 250(um) Heated Purge: (Y/N) N

Calibration Start Date: 02/06/2013 18:14 Calibration End Date: 02/06/2013 23:00 Calibration ID: 17714

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6 LVL 11	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6 LVL 11	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
4-Bromofluorobenzene	CBZ	Ave	138181 138154 222017	189014 149301	34734 148656	282047 171239	93841 188474	7.50 7.50 7.50	10.0 7.50	2.00 7.50	15.0 7.50	5.00 7.50
1,2-Dichlorobenzene-d4	DCB	Ave	112092 112630 172464	152403 124446	29945 119707	226234 135923	78401 153697	6.00 6.00 6.00	8.00 6.00	1.60 6.00	12.0 6.00	4.00 6.00

Curve Type Legend:

Ave = Average ISTD  
Lin1 = Linear 1/conc ISTD  
Lin2 = Linear 1/conc^2 ISTD  
None = No Calib Curve  
Qua2 = Quadratic 1/conc^2 ISTD

FORM VII  
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pleasanton Job No.: 720-47852-1  
SDG No.: \_\_\_\_\_  
Lab Sample ID: CCVIS 720-131252/2 Calibration Date: 02/26/2013 06:49  
Instrument ID: HP12 Calib Start Date: 01/23/2013 18:51  
GC Column: DB-VRX ID: 250.00 (um) Calib End Date: 01/23/2013 23:37  
Lab File ID: 02261302.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1-Chloropropane	Ave	0.0230	0.0189			25.0	-17.7	30.0
2-Nitropropane	Lin2		0.0433			25.0	-100.0*	30.0

FORM VII  
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pleasanton Job No.: 720-47852-1

SDG No.: \_\_\_\_\_

Lab Sample ID: CCVIS 720-131252/2 Calibration Date: 02/26/2013 06:49

Instrument ID: HP12 Calib Start Date: 02/06/2013 18:14

GC Column: DB-VRX ID: 250.00 (um) Calib End Date: 02/06/2013 23:00

Lab File ID: 02261302.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.4394	0.5977		34.0	25.0	36.0	40.0
Chloromethane	Ave	0.2731	0.3160	0.1000	28.9	25.0	15.7	40.0
Isobutane	Ave	0.1147	0.1356		29.6	25.0	18.2	30.0
Vinyl chloride	Ave	0.2924	0.3568		30.5	25.0	22.0*	20.0
Butadiene	Ave	0.2666	0.3052		28.6	25.0	14.5	40.0
Bromomethane	Ave	0.2023	0.2423		29.9	25.0	19.8	40.0
Ethanol	Lin2		0.1065		547	500	9.3	40.0
Chloroethane	Ave	0.1571	0.1806		28.7	25.0	15.0	40.0
Acrolein	Lin2		1.378		27.3	25.0	9.3	40.0
Acetonitrile	Lin1		0.0079		236	250	-5.6	30.0
Trichlorofluoromethane	Ave	0.5450	0.7028		32.2	25.0	28.9	40.0
Isopropyl alcohol	Lin2		0.6294		269	250	7.6	40.0
Acetone	Ave	0.0143	0.0125		109	125	-12.4	50.0
Diethyl ether	Ave	0.1489	0.1401		23.5	25.0	-5.9	30.0
2-Chloropropane	None					25.0	-100.0*	30.0
1,1-Dichloroethene	Ave	0.2507	0.2582		25.7	25.0	3.0	20.0
TBA	Ave	1.245	1.272		511	500	2.2	20.0
Acrylonitrile	None					25.0	-100.0*	30.0
Iodomethane	Ave	0.4285	0.4778		27.9	25.0	11.5	30.0
Methylene Chloride	Ave	0.2547	0.2507		24.6	25.0	-1.6	30.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2596	0.2933		28.3	25.0	13.0	40.0
3-Chloro-1-propene	Ave	0.1108	0.1165		26.3	25.0	5.1	30.0
Carbon disulfide	Ave	0.6038	0.7234		30.0	25.0	19.8	40.0
trans-1,2-Dichloroethene	Ave	0.2494	0.2553		25.6	25.0	2.4	30.0
Methyl tert-butyl ether	Ave	0.6122	0.5932		24.2	25.0	-3.1	20.0
1,1-Dichloroethane	Ave	0.4094	0.4213	0.1000	25.7	25.0	2.9	30.0
Propionitrile	Ave	0.0194	0.0161		207	250	-17.2	30.0
Vinyl acetate	Ave	0.3020	0.3086		25.5	25.0	2.2	40.0
2-Chloro-1,3-butadiene	Ave	0.4314	0.5031		29.2	25.0	16.6	30.0
Hexane	Ave	0.3257	0.3458		26.5	25.0	6.2*	0.0
2-Butanone (MEK)	Ave	0.0194	0.0167		107	125	-14.0	40.0
DIPE	Ave	0.6653	0.6109		23.0	25.0	-8.2	20.0
Methacrylonitrile	Ave	0.0551	0.0480		21.7	25.0	-13.0	30.0
cis-1,2-Dichloroethene	Ave	0.3215	0.3371		26.2	25.0	4.8	30.0
Chlorobromomethane	Ave	0.1655	0.1723		26.0	25.0	4.1	30.0
Chloroform	Ave	0.4592	0.5112		27.8	25.0	11.3	20.0
Ethyl tert-butyl ether	Ave	0.6672	0.6556		24.6	25.0	-1.7	20.0
Isobutyl alcohol	Ave	0.8528	1.015		298	250	19.0	40.0
2,2-Dichloropropane	Lin2		0.2850		33.7	25.0	34.9*	30.0
Tetrahydrofuran	Ave	0.0461	0.0343		18.6	25.0	-25.6	40.0

FORM VII  
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pleasanton Job No.: 720-47852-1

SDG No.: \_\_\_\_\_

Lab Sample ID: CCVIS 720-131252/2 Calibration Date: 02/26/2013 06:49

Instrument ID: HP12 Calib Start Date: 02/06/2013 18:14

GC Column: DB-VRX ID: 250.00 (um) Calib End Date: 02/06/2013 23:00

Lab File ID: 02261302.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dichloroethane	Ave	0.3362	0.3643		27.1	25.0	8.4	30.0
1,1,1-Trichloroethane	Ave	0.4635	0.6006		32.4	25.0	29.6	30.0
1,1-Dichloropropene	Ave	0.3324	0.3686		27.7	25.0	10.9	30.0
Carbon tetrachloride	Ave	0.4239	0.5832		34.4	25.0	37.6*	30.0
Benzene	Ave	0.9069	0.9077		25.0	25.0	0.0	30.0
TAME	Ave	0.5799	0.5618		24.2	25.0	-3.1	20.0
Dibromomethane	Ave	0.1237	0.1256		25.4	25.0	1.5	30.0
1,2-Dichloropropane	Ave	0.1907	0.1808		23.7	25.0	-5.2	20.0
Trichloroethene	Ave	0.3144	0.3408		27.1	25.0	8.4	30.0
Dichlorobromomethane	Lin2		0.3635		27.7	25.0	10.7	30.0
Methyl methacrylate	Ave	0.1096	0.0999		22.8	25.0	-8.8	30.0
2-Chloroethyl vinyl ether	Lin2		0.0401		11.2	25.0	-55.4*	40.0
cis-1,3-Dichloropropene	Lin2		0.3127		25.5	25.0	1.9	30.0
4-Methyl-2-pentanone (MIBK)	Ave	0.1705	0.1377		101	125	-19.2	40.0
trans-1,3-Dichloropropene	Lin2		0.3220		26.4	25.0	5.6	30.0
1,1,2-Trichloroethane	Ave	0.1333	0.1274		23.9	25.0	-4.4	30.0
Paraldehyde	Qua2		0.0047		6.94	25.0	-72.2*	40.0
Toluene	Ave	0.7868	0.7971		25.3	25.0	1.3	20.0
Ethyl methacrylate	Ave	0.2234	0.2077		23.3	25.0	-7.0	30.0
1,3-Dichloropropane	Ave	0.2956	0.2875		24.3	25.0	-2.7	30.0
2-Hexanone	Ave	0.1294	0.1010		97.6	125	-22.0	40.0
Chlorodibromomethane	Qua2		0.2641		28.9	25.0	15.7	30.0
Ethylene Dibromide	Ave	0.1777	0.1811		25.5	25.0	1.9	30.0
Tetrachloroethene	Ave	0.2271	0.2504		27.6	25.0	10.2	30.0
1,1,1,2-Tetrachloroethane	Ave	0.3111	0.3677		29.5	25.0	18.2	30.0
Chlorobenzene	Ave	0.9461	0.9809	0.3000	25.9	25.0	3.7	30.0
Butyl Ether	Ave	0.2357	0.2270		24.1	25.0	-3.7	30.0
Ethylbenzene	Ave	1.568	1.692		27.0	25.0	7.9	20.0
m-Xylene & p-Xylene	Ave	1.241	1.360		54.8	50.0	9.6	30.0
Bromoform	Qua2		0.1416	0.1000	27.2	25.0	9.0	40.0
Styrene	Ave	0.9227	1.002		27.2	25.0	8.6	30.0
1,1,2,2-Tetrachloroethane	Ave	0.4480	0.4125	0.3000	23.0	25.0	-7.9	30.0
o-Xylene	Ave	1.250	1.372		27.4	25.0	9.7	30.0
1,2,3-Trichloropropane	Ave	0.1797	0.1749		24.3	25.0	-2.7	30.0
trans-1,4-Dichloro-2-butene	Qua2		0.0797		25.9	25.0	3.6	30.0
Isopropylbenzene	Ave	1.698	1.932		28.4	25.0	13.7	30.0
Bromobenzene	Ave	0.7092	0.7275		25.6	25.0	2.6	30.0
N-Propylbenzene	Ave	3.509	3.917		27.9	25.0	11.6	30.0
2-Chlorotoluene	Ave	2.125	2.271		26.7	25.0	6.9	30.0
4-Chlorotoluene	Ave	2.174	2.366		27.2	25.0	8.8	30.0
1,3,5-Trimethylbenzene	Ave	2.722	3.016		27.7	25.0	10.8	30.0

FORM VII  
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pleasanton Job No.: 720-47852-1  
 SDG No.: \_\_\_\_\_  
 Lab Sample ID: CCVIS 720-131252/2 Calibration Date: 02/26/2013 06:49  
 Instrument ID: HP12 Calib Start Date: 02/06/2013 18:14  
 GC Column: DB-VRX ID: 250.00 (um) Calib End Date: 02/06/2013 23:00  
 Lab File ID: 02261302.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
tert-Butylbenzene	Ave	2.682	2.891		26.9	25.0	7.8	30.0
1,2,4-Trimethylbenzene	Ave	2.712	2.969		27.4	25.0	9.5	30.0
sec-Butylbenzene	Ave	3.607	3.933		27.3	25.0	9.0	30.0
1,3-Dichlorobenzene	Ave	1.539	1.599		26.0	25.0	3.9	30.0
1,4-Dichlorobenzene	Ave	1.549	1.589		25.7	25.0	2.6	30.0
4-Isopropyltoluene	Ave	3.387	3.730		27.5	25.0	10.1	30.0
1,2-Dichlorobenzene	Ave	1.425	1.336		23.4	25.0	-6.2	30.0
n-Butylbenzene	Ave	2.686	2.912		27.1	25.0	8.4	30.0
1,2-Dibromo-3-Chloropropane	Qua2		0.0724		18.0	25.0	-28.1	40.0
Hexachloroethane	Qua2		0.4799		24.3	25.0	-2.7	30.0
1,2,4-Trichlorobenzene	Ave	0.8438	0.6541		19.4	25.0	-22.5	40.0
Naphthalene	Ave	2.166	1.484		17.1	25.0	-31.5	40.0
Hexachlorobutadiene	Ave	0.4558	0.3720		20.4	25.0	-18.4	30.0
1,2,3-Trichlorobenzene	Ave	0.7688	0.5206		16.9	25.0	-32.3	40.0
Dibromofluoromethane (Surr)	Ave	0.2662	0.2868		8.08	7.50	7.8	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2982	0.3134		7.88	7.50	5.1	20.0
1,4-Difluorobenzene	Ave	0.9160	0.9464		6.20	6.00	3.3	20.0
Toluene-d8 (Surr)	Ave	0.996	1.017		7.66	7.50	2.1	20.0
4-Bromofluorobenzene	Ave	0.4583	0.4800		7.85	7.50	4.7	20.0
1,2-Dichlorobenzene-d4	Ave	0.8933	0.8177		5.49	6.00	-8.5	20.0

FORM VII  
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pleasanton Job No.: 720-47852-1  
 SDG No.: \_\_\_\_\_  
 Lab Sample ID: CCV 720-131252/3 Calibration Date: 02/26/2013 07:17  
 Instrument ID: HP12 Calib Start Date: 01/24/2013 10:52  
 GC Column: DB-VRX ID: 250.00 (um) Calib End Date: 01/24/2013 13:43  
 Lab File ID: 02261303.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
C4-C10	Ave	1.635	1.893		579	500	15.8	20.0
C6-C8	Ave	0.7488	0.8700		581	500	16.2	20.0
Gasoline Range Organics (GRO)-C5-C12	Ave	1.863	2.168		582	500	16.4	20.0
C4-C12	Ave	2.125	2.484		585	500	16.9	20.0
C6-C10	Ave	1.345	1.604		596	500	19.2	20.0
C6-C12	Ave	1.834	2.194		598	500	19.6	20.0
C8-C10	Ave	0.5793	0.7039		608	500	21.5*	20.0
C7-C12	Ave	1.606	1.916		596	500	19.3	20.0
C6-C9	Ave	0.2902				500		



FORM VII  
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pleasanton Job No.: 720-47852-1  
 SDG No.: \_\_\_\_\_  
 Lab Sample ID: CCV 720-131252/3 Calibration Date: 02/26/2013 07:17  
 Instrument ID: HP12 Calib Start Date: 02/06/2013 18:14  
 GC Column: DB-VRX ID: 250.00 (um) Calib End Date: 02/06/2013 23:00  
 Lab File ID: 02261303.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dibromofluoromethane (Surr)	Ave	0.2662	0.2689		7.58	7.50	1.0	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2982	0.3156		7.94	7.50	5.8	20.0
1,4-Difluorobenzene	Ave	0.9160	0.9413		6.17	6.00	2.8	20.0
Toluene-d8 (Surr)	Ave	0.996	1.015		7.64	7.50	1.9	20.0
4-Bromofluorobenzene	Ave	0.4583	0.4668		7.64	7.50	1.9	20.0
1,2-Dichlorobenzene-d4	Ave	0.8933	0.8843		5.94	6.00	-1.0	20.0

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-47852-1  
SDG No.: \_\_\_\_\_  
Client Sample ID: \_\_\_\_\_ Lab Sample ID: MB 720-131252/4  
Matrix: Water Lab File ID: 02261304.D  
Analysis Method: 8260B/CA\_LUFTMS Date Collected: \_\_\_\_\_  
Sample wt/vol: 10 (mL) Date Analyzed: 02/26/2013 08:04  
Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
Soil Extract Vol.: \_\_\_\_\_ GC Column: DB-VRX ID: 250 (um)  
% Moisture: \_\_\_\_\_ Level: (low/med) Low  
Analysis Batch No.: 131252 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00349	Gasoline Range Organics (GRO)-C5-C12	36.6	J	50	21

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	98		67-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	100		75-138
2037-26-5	Toluene-d8 (Surr)	97		70-130

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-47852-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: \_\_\_\_\_ Lab Sample ID: LCS 720-131252/10  
 Matrix: Water Lab File ID: 02261311.D  
 Analysis Method: 8260B/CA\_LUFTMS Date Collected: \_\_\_\_\_  
 Sample wt/vol: 10 (mL) Date Analyzed: 02/26/2013 11:40  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: DB-VRX ID: 250 (um)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 131252 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00349	Gasoline Range Organics (GRO)-C5-C12	520		50	21

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	103		67-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	100		75-138
2037-26-5	Toluene-d8 (Surr)	101		70-130

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-47852-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: \_\_\_\_\_ Lab Sample ID: LCSD 720-131252/11  
 Matrix: Water Lab File ID: 02261310.D  
 Analysis Method: 8260B/CA\_LUFTMS Date Collected: \_\_\_\_\_  
 Sample wt/vol: 10 (mL) Date Analyzed: 02/26/2013 11:12  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: DB-VRX ID: 250 (um)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 131252 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00349	Gasoline Range Organics (GRO)-C5-C12	530		50	21

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	103		67-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		75-138
2037-26-5	Toluene-d8 (Surr)	102		70-130

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-47852-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: LRTC-SW-1 MS Lab Sample ID: 720-47852-1 MS  
 Matrix: Water Lab File ID: 02261322.D  
 Analysis Method: 8260B/CA\_LUFTMS Date Collected: 02/19/2013 11:05  
 Sample wt/vol: 10 (mL) Date Analyzed: 02/26/2013 16:54  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: DB-VRX ID: 250 (um)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 131252 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00349	Gasoline Range Organics (GRO)-C5-C12	458		50	21

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	98		67-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	101		75-138
2037-26-5	Toluene-d8 (Surr)	100		70-130

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pleasanton Job No.: 720-47852-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: LRTC-SW-1 MSD Lab Sample ID: 720-47852-1 MSD  
 Matrix: Water Lab File ID: 02261323.D  
 Analysis Method: 8260B/CA\_LUFTMS Date Collected: 02/19/2013 11:05  
 Sample wt/vol: 10 (mL) Date Analyzed: 02/26/2013 17:23  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: DB-VRX ID: 250 (um)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 131252 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
STL00349	Gasoline Range Organics (GRO)-C5-C12	462		50	21

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene	99		67-130
17060-07-0	1,2-Dichloroethane-d4 (Surr)	98		75-138
2037-26-5	Toluene-d8 (Surr)	100		70-130

## GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pleasanton Job No.: 720-47852-1

SDG No.: \_\_\_\_\_

Instrument ID: HP12 Start Date: 01/24/2013 09:20Analysis Batch Number: 129366 End Date: 01/24/2013 14:41

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 720-129366/1		01/24/2013 09:20	1	01241301.D	DB-VRX 250 (um)
ZZZZZ		01/24/2013 09:55	1		DB-VRX 250 (um)
STD50 720-129366/4 IC		01/24/2013 10:52	1	01241314.D	DB-VRX 250 (um)
STD100 720-129366/5 IC		01/24/2013 11:21	1	01241315.D	DB-VRX 250 (um)
STD200 720-129366/6 IC		01/24/2013 11:49	1	01241316.D	DB-VRX 250 (um)
STD500 720-129366/7 IC		01/24/2013 12:18	1	01241317.D	DB-VRX 250 (um)
STD1000 720-129366/8 IC		01/24/2013 12:46	1	01241318.D	DB-VRX 250 (um)
STD2000 720-129366/9 IC		01/24/2013 13:15	1	01241319.D	DB-VRX 250 (um)
STD4000 720-129366/10 IC		01/24/2013 13:43	1	01241320.D	DB-VRX 250 (um)
ICV 720-129366/12		01/24/2013 14:41	1		DB-VRX 250 (um)

## GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica PleasantonJob No.: 720-47852-1

SDG No.: \_\_\_\_\_

Instrument ID: HP12Start Date: 02/06/2013 16:49Analysis Batch Number: 130203End Date: 02/06/2013 23:57

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 720-130203/1		02/06/2013 16:49	1	02061302.D	DB-VRX 250 (um)
ZZZZZ		02/06/2013 17:17	1		DB-VRX 250 (um)
ZZZZZ		02/06/2013 17:45	1		DB-VRX 250 (um)
STD01 720-130203/5 IC		02/06/2013 18:14	1	02061305.D	DB-VRX 250 (um)
STD02 720-130203/6 IC		02/06/2013 18:43	1	02061306.D	DB-VRX 250 (um)
STD05 720-130203/7 IC		02/06/2013 19:11	1	02061307.D	DB-VRX 250 (um)
STD1 720-130203/8 IC		02/06/2013 19:40	1	02061308.D	DB-VRX 250 (um)
STD2 720-130203/9 IC		02/06/2013 20:08	1	02061309.D	DB-VRX 250 (um)
STD5 720-130203/10 IC		02/06/2013 20:37	1	02061310.D	DB-VRX 250 (um)
STD10 720-130203/11 ICIS		02/06/2013 21:05	1	02061311.D	DB-VRX 250 (um)
STD20 720-130203/12 IC		02/06/2013 21:34	1	02061312.D	DB-VRX 250 (um)
STD50 720-130203/13 IC		02/06/2013 22:03	1	02061313.D	DB-VRX 250 (um)
STD100 720-130203/14 IC		02/06/2013 22:31	1	02061314.D	DB-VRX 250 (um)
STD200 720-130203/15 IC		02/06/2013 23:00	1	02061315.D	DB-VRX 250 (um)
ZZZZZ		02/06/2013 23:28	1		DB-VRX 250 (um)
ICV 720-130203/17		02/06/2013 23:57	1		DB-VRX 250 (um)



## GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica PleasantonJob No.: 720-47852-1

SDG No.: \_\_\_\_\_

Instrument ID: HP12Start Date: 02/26/2013 06:21Analysis Batch Number: 131252End Date: 02/26/2013 18:20

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 720-131252/1		02/26/2013 06:21	1	02261301.D	DB-VRX 250 (um)
CCVIS 720-131252/2		02/26/2013 06:49	1	02261302.D	DB-VRX 250 (um)
CCV 720-131252/3		02/26/2013 07:17	1	02261303.D	DB-VRX 250 (um)
MB 720-131252/4		02/26/2013 08:04	1	02261304.D	DB-VRX 250 (um)
ZZZZZ		02/26/2013 08:49	1		DB-VRX 250 (um)
ZZZZZ		02/26/2013 09:17	1		DB-VRX 250 (um)
ZZZZZ		02/26/2013 09:46	1		DB-VRX 250 (um)
ZZZZZ		02/26/2013 10:14	1		DB-VRX 250 (um)
ZZZZZ		02/26/2013 10:43	5		DB-VRX 250 (um)
LCSD 720-131252/11		02/26/2013 11:12	1	02261310.D	DB-VRX 250 (um)
LCS 720-131252/10		02/26/2013 11:40	1	02261311.D	DB-VRX 250 (um)
ZZZZZ		02/26/2013 12:09	5		DB-VRX 250 (um)
ZZZZZ		02/26/2013 12:37	1		DB-VRX 250 (um)
ZZZZZ		02/26/2013 13:06	1		DB-VRX 250 (um)
ZZZZZ		02/26/2013 13:34	1		DB-VRX 250 (um)
ZZZZZ		02/26/2013 14:03	1		DB-VRX 250 (um)
ZZZZZ		02/26/2013 14:31	1		DB-VRX 250 (um)
ZZZZZ		02/26/2013 15:00	1		DB-VRX 250 (um)
ZZZZZ		02/26/2013 15:29	1		DB-VRX 250 (um)
ZZZZZ		02/26/2013 15:57	1		DB-VRX 250 (um)
720-47852-1	LRTC-SW-1	02/26/2013 16:26	1	02261321.D	DB-VRX 250 (um)
720-47852-1 MS	LRTC-SW-1 MS	02/26/2013 16:54	1	02261322.D	DB-VRX 250 (um)
720-47852-1 MSD	LRTC-SW-1 MSD	02/26/2013 17:23	1	02261323.D	DB-VRX 250 (um)
RINSE 720-131252/24		02/26/2013 17:52	1		DB-VRX 250 (um)
ZZZZZ		02/26/2013 18:20	1		DB-VRX 250 (um)

# **GENERAL CHEMISTRY**

COVER PAGE  
GENERAL CHEMISTRY

Lab Name: TestAmerica Irvine Job Number: 720-47852-1

SDG No.: \_\_\_\_\_

Project: LRTC Stormwater

Client Sample ID  
LRTC-SW-1

Lab Sample ID  
720-47852-1

Comments:

1B-IN  
INORGANIC ANALYSIS DATA SHEET  
GENERAL CHEMISTRY

Client Sample ID: LRTC-SW-1

Lab Sample ID: 720-47852-1

Lab Name: TestAmerica Irvine

Job No.: 720-47852-1

SDG ID.:

Matrix: Water

Date Sampled: 02/19/2013 11:05

Reporting Basis: WET

Date Received: 02/19/2013 15:55

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Total Suspended Solids	61	10	10	mg/L			1	SM 2540D

3-IN  
METHOD BLANK  
GENERAL CHEMISTRY

Lab Name: TestAmerica Irvine Job No.: 720-47852-1

SDG No.: \_\_\_\_\_

Method	Lab Sample ID	Analyte	Result	Qual	Units	RL	Dil
Batch ID: 86983 Date: 02/21/2013 15:49							
SM 2540D	MB 440-86983/1	Total Suspended Solids	ND		mg/L	10	1

7A-IN  
LAB CONTROL SAMPLE  
GENERAL CHEMISTRY

Lab Name: TestAmerica Irvine Job No.: 720-47852-1

SDG No.: \_\_\_\_\_

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 86983		Date: 02/21/2013 15:49									
						LCS Source: WCTSSLCS_00056					
SM	LCS	Total Suspended Solids	993		mg/L	1000	99	85-115			
2540D	440-86983/2										

Calculations are performed before rounding to avoid round-off errors in calculated results.

9-IN  
DETECTION LIMITS  
GENERAL CHEMISTRY

Lab Name: TestAmerica Irvine Job Number: 720-47852-1  
SDG Number: \_\_\_\_\_  
Matrix: Water Instrument ID: BAL067  
Method: SM 2540D MDL Date: 10/04/2010 16:01

Analyte	Wavelength/ Mass	RL (mg/L)	MDL (mg/L)
Total Suspended Solids		10	10

9-IN  
CALIBRATION BLANK DETECTION LIMITS  
GENERAL CHEMISTRY

Lab Name: TestAmerica Irvine Job Number: 720-47852-1  
SDG Number: \_\_\_\_\_  
Matrix: Water Instrument ID: BAL067  
Method: SM 2540D XMDL Date: 10/04/2010 15:49

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Total Suspended Solids		10	10



13-IN  
ANALYSIS RUN LOG  
GENERAL CHEMISTRY

Lab Name: TestAmerica Irvine Job No.: 720-47852-1

SDG No.:

Instrument ID: BAL067 Method: SM 2540D

Start Date: 02/21/2013 15:49 End Date: 02/21/2013 15:49

[illegible]

## Prep Types

---

---

T = Total/NA

## GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Irvine Job No.: 720-47852-1

SDG No.: \_\_\_\_\_

Batch Number: 86983 Batch Start Date: 02/21/13 15:49 Batch Analyst: Kristofik, DushanBatch Method: SM 2540D Batch End Date: \_\_\_\_\_

Lab Sample ID	Client Sample ID	Method Chain	Basis	FinalAmount	TareWeight	InitialAmount	Weight1	Weight2	Weight3
MB 440-86983/1		SM 2540D		100 mL	0.1106 g	100 mL	0.1106 g	0.1106 g	0 g
LCS 440-86983/2		SM 2540D		100 mL	0.1136 g	100 mL	0.2129 g	0.2129 g	0 g
720-47852-F-1	LRTC-SW-1	SM 2540D	T	100 mL	0.1128 g	100 mL	0.1188 g	0.1189 g	0 g

Lab Sample ID	Client Sample ID	Method Chain	Basis	WeightOne%Diff	Residue	Residue2	ResDishWt	DishWeight	WCTSSLCS 00056
MB 440-86983/1		SM 2540D		PASS <0.5mg	0 g	0 g	0.1106 g	0.1106 g	
LCS 440-86983/2		SM 2540D		PASS <0.5mg	0.0993 g	0.0993 g	0.2129 g	0.1136 g	100 mL
720-47852-F-1	LRTC-SW-1	SM 2540D	T	PASS <0.5mg	0.006 g	0.0061 g	0.1189 g	0.1128 g	

Batch Notes	
Balance ID	#67
Constant Weight (WT2) Date/Time in Oven	02/22/13/14:00
Constant Weight (WT2) Date/Time Out	02/22/13/14:30
Constant Weight (WT2) Temp In	104 Celsius
Constant Weight (WT2) Temp Out	104 Celsius
Filter Paper Lot Number	600004-2191-R1
Date samples were placed in the oven	02/21/13/17:00
Oven Temp when samples are put in oven	104 Celsius
Nominal Amount Used	100 mL
Date samples were removed from oven	02/22/13/13:00
Oven Temp when samples removed from oven	104 Celsius
Oven ID	06
Perform Calculation (0=No, 1=Yes)	1
ID number of the thermometer	O-007

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

SM 2540D

Page 1 of 1

# Subcontract Data

# Shipping and Receiving Documents

# Chain of Custody Record

TestAmerica  
1720 Quarry Lane  
Pleasanton, CA 94566  
Phone: 925-484-1919 ext.137

Please send analytic results, electronic deliverables and the original chain-of-custody form to:  
labresults@weiss.com  
gch@weiss.com  
sab@weiss.com

INSTRUCTIONS FOR LAB PERSONNEL:  
GeoTracker EDF required? ☐ Yes ☒ No  
Equis 4 file EDWEDD required? ☐ Yes ☒ No  
Specify analytic/prep method and detection limit in report.  
Notify us of any anomalous peaks in GC or other scans.  
Call immediately with any questions or problems.

Weiss Associates



720-47852

3.20

144127

03/01/2013

Client Contact: Scott Bourne

Project ID: 426-1966.1

Project Manager: Scott Bourne

Sampled by: EWA Ven/Gary Hubbard

Sample date(s): 2/19/13

Analysis Turnaround Time:

Standard (5 Day)

Job Name: LRCT Storm Event Inspection Sam

Address: Levia Richmond Terminal

Lab ID: Sample Identification

Sample Date: 2/19/13

Sample Time: 1105

Sample Matrix: W

# of Cont: 3

Field Filtered (X):

Preservation Used: 1= Ice, 2= HCl, 3= H<sub>2</sub>SO<sub>4</sub>, 4= HNO<sub>3</sub>, 5= NaOH, 6= Other

Special Instructions/OC Requirements & Comments: Level III Report. \* Run MS/MSD. Filter - preserve dissolved metals immediately. EXCESS FAHs immediately.

PLEASE HOLD: metals (total and dissolved) analysis after filter/preservation (including Ag)

Oil and Grease

PAHs (after extraction). HOLD until given further instruction by Weiss Associates

Relinquished by: [Signature]

Company: WEISS ASSOCIATES

Date/Time: 2/19/13 1508

Relinquished by: [Signature]

Company: TA

Date/Time: 2-19-13 1555

Relinquished by: [Signature]

Company: [Signature]

Date/Time: 2-19-13 1555

Received by: [Signature]

Company: [Signature]

Date/Time: 2-19-13 1555

Received by: [Signature]

Company: [Signature]

Date/Time: 2-19-13 1555

Received by: [Signature]

Company: [Signature]

Date/Time: 2-19-13 1555

Received by: [Signature]

Company: [Signature]

COC Number:

Page 1 of 1

SDG number:

Sample Specific Notes:

For dissolved metals and mercury, lab filter and preserve immediately. Run MS/MSD. For dissolved metals and mercury, lab filter and preserve immediately. HOLD

## Login Sample Receipt Checklist

Client: Weiss Associates

Job Number: 720-47852-1

Login Number: 47852

List Source: TestAmerica Pleasanton

List Number: 1

Creator: Bullock, Tracy

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	False	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ ( $1/4"$ ).	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

## Login Sample Receipt Checklist

Client: Weiss Associates

Job Number: 720-47852-1

Login Number: 47852

List Number: 1

Creator: Soderblom, Tim

List Source: TestAmerica Irvine

List Creation: 02/21/13 01:13 PM

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	N/A	
Samples do not require splitting or compositing.	N/A	
Residual Chlorine Checked.	N/A	

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Pleasanton

1220 Quarry Lane

Pleasanton, CA 94566

Tel: (925)484-1919

TestAmerica Job ID: 720-48852-1

Client Project/Site: LRTC Storm Event Inspection Sampling

For:

Weiss Associates

2200 Powell Street

Suite 925

Emeryville, California 94608

Attn: Greg Hulburd



Authorized for release by:

4/12/2013 5:37:28 PM

Micah Smith

Project Manager I

[micah.smith@testamericainc.com](mailto:micah.smith@testamericainc.com)

### LINKS

Review your project  
results through

TotalAccess

Have a Question?



Visit us at:

[www.testamericainc.com](http://www.testamericainc.com)

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*



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## Definitions/Glossary

Client: Weiss Associates  
Project/Site: LRTC Storm Envent Inspection Sampling

TestAmerica Job ID: 720-48852-1

### Qualifiers

#### GC/MS Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

#### Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

### Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

## Case Narrative

Client: Weiss Associates  
Project/Site: LRTC Storm Envent Inspection Sampling

TestAmerica Job ID: 720-48852-1

**Job ID: 720-48852-1**

**Laboratory: TestAmerica Pleasanton**

### Narrative

#### Job Narrative 720-48852-1

#### Comments

This report has the lab filtered portion of the data. The field filtered data is reported in job 720-48852-2.  
FILTRATION: Lab filtered samples were filtered in the lab using 0.45um pore filter paper per client instructions.

#### Receipt

The samples were received on 4/4/2013 5:00 PM; the samples arrived in good condition, properly preserved and, where required, on ice.  
The temperatures of the 3 coolers at receipt time were 2.4° C, 5.4° C and 5.8° C.

Except:

Insufficient sample volume was provided for the following sample for the MS/MSD for all analyses except Metals 200.8/245.1:  
LRTC-SW-02.

#### GC/MS Semi VOA

No analytical or quality issues were noted.

#### Metals

No other analytical or quality issues were noted.

#### General Chemistry

No analytical or quality issues were noted.

#### Organic Prep

No analytical or quality issues were noted.

# Detection Summary

Client: Weiss Associates  
Project/Site: LRTC Storm Envent Inspection Sampling

TestAmerica Job ID: 720-48852-1

Client Sample ID: LRTC-SW-02

Lab Sample ID: 720-48852-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Naphthalene	0.14		0.11	0.033	ug/L	1		1	8270C SIM	Total/NA
Fluorene	0.070	J	0.11	0.034	ug/L	1		1	8270C SIM	Total/NA
Phenanthrene	0.69		0.11	0.033	ug/L	1		1	8270C SIM	Total/NA
Anthracene	0.22		0.11	0.032	ug/L	1		1	8270C SIM	Total/NA
Benzo[a]anthracene	1.6		0.11	0.029	ug/L	1		1	8270C SIM	Total/NA
Chrysene	2.3		0.11	0.034	ug/L	1		1	8270C SIM	Total/NA
Benzo[a]pyrene	1.9		0.11	0.025	ug/L	1		1	8270C SIM	Total/NA
Benzo[b]fluoranthene	1.0		0.11	0.033	ug/L	1		1	8270C SIM	Total/NA
Benzo[k]fluoranthene	0.31		0.11	0.037	ug/L	1		1	8270C SIM	Total/NA
Benzo[g,h,i]perylene	1.6		0.11	0.024	ug/L	1		1	8270C SIM	Total/NA
Indeno[1,2,3-cd]pyrene	0.49		0.11	0.029	ug/L	1		1	8270C SIM	Total/NA
Fluoranthene	0.26		0.11	0.033	ug/L	1		1	8270C SIM	Total/NA
Pyrene	0.99		0.11	0.038	ug/L	1		1	8270C SIM	Total/NA
Dibenz(a,h)anthracene	0.81		0.11	0.028	ug/L	1		1	8270C SIM	Total/NA
Aluminum	300		10	8.5	ug/L	1			200.8	Total Recoverable
Arsenic	1.2		1.0	0.90	ug/L	1			200.8	Total Recoverable
Barium	14		1.0	0.30	ug/L	1			200.8	Total Recoverable
Cobalt	0.36	J	1.0	0.10	ug/L	1			200.8	Total Recoverable
Chromium	4.1		2.0	0.90	ug/L	1			200.8	Total Recoverable
Copper	2.9		2.0	0.50	ug/L	1			200.8	Total Recoverable
Iron	560		20	8.0	ug/L	1			200.8	Total Recoverable
Molybdenum	4.6		2.0	0.20	ug/L	1			200.8	Total Recoverable
Nickel	4.1		2.0	0.50	ug/L	1			200.8	Total Recoverable
Lead	2.4		1.0	0.20	ug/L	1			200.8	Total Recoverable
Antimony	7.1		2.0	0.30	ug/L	1			200.8	Total Recoverable
Selenium	1.2	J	2.0	0.50	ug/L	1			200.8	Total Recoverable
Vanadium	65		2.0	0.80	ug/L	1			200.8	Total Recoverable
Zinc	33		20	4.0	ug/L	1			200.8	Total Recoverable
Barium	79		1.0	0.30	ug/L	1			200.8	Dissolved
Chromium	2.6		2.0	0.90	ug/L	1			200.8	Dissolved
Copper	1.2	J	2.0	0.50	ug/L	1			200.8	Dissolved
Iron	11	J	20	8.0	ug/L	1			200.8	Dissolved
Molybdenum	4.5		2.0	0.20	ug/L	1			200.8	Dissolved
Antimony	6.9		2.0	0.30	ug/L	1			200.8	Dissolved
Selenium	0.56	J	2.0	0.50	ug/L	1			200.8	Dissolved
Thallium	0.23	J	1.0	0.20	ug/L	1			200.8	Dissolved
Vanadium	61		2.0	0.80	ug/L	1			200.8	Dissolved
Zinc	26		20	4.0	ug/L	1			200.8	Dissolved
Total Suspended Solids	46		10	10	mg/L	1			SM 2540D	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Pleasanton

# Detection Summary

Client: Weiss Associates  
Project/Site: LRTC Storm Envent Inspection Sampling

TestAmerica Job ID: 720-48852-1

Client Sample ID: LRTC-SW-03

Lab Sample ID: 720-48852-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Naphthalene	0.12		0.11	0.032	ug/L			1	8270C SIM	Total/NA
Fluorene	0.059	J	0.11	0.033	ug/L			1	8270C SIM	Total/NA
Phenanthrene	0.54		0.11	0.032	ug/L			1	8270C SIM	Total/NA
Anthracene	0.24		0.11	0.031	ug/L			1	8270C SIM	Total/NA
Benzo[a]anthracene	1.2		0.11	0.028	ug/L			1	8270C SIM	Total/NA
Chrysene	1.6		0.11	0.033	ug/L			1	8270C SIM	Total/NA
Benzo[a]pyrene	1.4		0.11	0.024	ug/L			1	8270C SIM	Total/NA
Benzo[b]fluoranthene	0.74		0.11	0.032	ug/L			1	8270C SIM	Total/NA
Benzo[k]fluoranthene	0.20		0.11	0.036	ug/L			1	8270C SIM	Total/NA
Benzo[g,h,i]perylene	1.1		0.11	0.023	ug/L			1	8270C SIM	Total/NA
Indeno[1,2,3-cd]pyrene	0.34		0.11	0.028	ug/L			1	8270C SIM	Total/NA
Fluoranthene	0.20		0.11	0.032	ug/L			1	8270C SIM	Total/NA
Pyrene	0.73		0.11	0.037	ug/L			1	8270C SIM	Total/NA
Dibenz(a,h)anthracene	0.56		0.11	0.027	ug/L			1	8270C SIM	Total/NA
Benzo[a]anthracene	0.030	J	0.10	0.028	ug/L			1	8270C SIM	Dissolved
Benzo[a]pyrene	0.035	J	0.10	0.024	ug/L			1	8270C SIM	Dissolved
Aluminum	130		10	8.5	ug/L			1	200.8	Total Recoverable
Arsenic	0.99	J	1.0	0.90	ug/L			1	200.8	Total Recoverable
Barium	12		1.0	0.30	ug/L			1	200.8	Total Recoverable
Cobalt	0.21	J	1.0	0.10	ug/L			1	200.8	Total Recoverable
Chromium	3.2		2.0	0.90	ug/L			1	200.8	Total Recoverable
Copper	1.9	J	2.0	0.50	ug/L			1	200.8	Total Recoverable
Iron	220		20	8.0	ug/L			1	200.8	Total Recoverable
Molybdenum	5.0		2.0	0.20	ug/L			1	200.8	Total Recoverable
Nickel	2.4		2.0	0.50	ug/L			1	200.8	Total Recoverable
Lead	1.1		1.0	0.20	ug/L			1	200.8	Total Recoverable
Antimony	7.8		2.0	0.30	ug/L			1	200.8	Total Recoverable
Selenium	1.4	J	2.0	0.50	ug/L			1	200.8	Total Recoverable
Vanadium	77		2.0	0.80	ug/L			1	200.8	Total Recoverable
Zinc	17	J	20	4.0	ug/L			1	200.8	Total Recoverable
Arsenic	0.90	J	1.0	0.90	ug/L			1	200.8	Dissolved
Barium	71		1.0	0.30	ug/L			1	200.8	Dissolved
Cobalt	0.10	J	1.0	0.10	ug/L			1	200.8	Dissolved
Chromium	2.4		2.0	0.90	ug/L			1	200.8	Dissolved
Copper	1.0	J	2.0	0.50	ug/L			1	200.8	Dissolved
Iron	14	J	20	8.0	ug/L			1	200.8	Dissolved
Molybdenum	4.8		2.0	0.20	ug/L			1	200.8	Dissolved
Nickel	0.51	J	2.0	0.50	ug/L			1	200.8	Dissolved
Antimony	7.5		2.0	0.30	ug/L			1	200.8	Dissolved
Selenium	0.98	J	2.0	0.50	ug/L			1	200.8	Dissolved

This Detection Summary does not include radiochemical test results.

TestAmerica Pleasanton

## Detection Summary

Client: Weiss Associates  
Project/Site: LRTC Storm Envent Inspection Sampling

TestAmerica Job ID: 720-48852-1

### Client Sample ID: LRTC-SW-03 (Continued)

Lab Sample ID: 720-48852-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vanadium	72		2.0	0.80	ug/L	1		200.8	Dissolved
Zinc	26		20	4.0	ug/L	1		200.8	Dissolved
Total Suspended Solids	20		10	10	mg/L	1		SM 2540D	Total/NA

### Client Sample ID: LRTC-SW-04

Lab Sample ID: 720-48852-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	0.038	J	0.10	0.031	ug/L	1		8270C SIM	Total/NA
Phenanthrene	0.22		0.10	0.031	ug/L	1		8270C SIM	Total/NA
Anthracene	0.056	J	0.10	0.030	ug/L	1		8270C SIM	Total/NA
Benzo[a]anthracene	0.27		0.10	0.028	ug/L	1		8270C SIM	Total/NA
Chrysene	0.42		0.10	0.032	ug/L	1		8270C SIM	Total/NA
Benzo[a]pyrene	0.25		0.10	0.023	ug/L	1		8270C SIM	Total/NA
Benzo[b]fluoranthene	0.23		0.10	0.031	ug/L	1		8270C SIM	Total/NA
Benzo[k]fluoranthene	0.055	J	0.10	0.035	ug/L	1		8270C SIM	Total/NA
Benzo[g,h,i]perylene	0.23		0.10	0.022	ug/L	1		8270C SIM	Total/NA
Indeno[1,2,3-cd]pyrene	0.086	J	0.10	0.028	ug/L	1		8270C SIM	Total/NA
Fluoranthene	0.29		0.10	0.031	ug/L	1		8270C SIM	Total/NA
Pyrene	0.32		0.10	0.036	ug/L	1		8270C SIM	Total/NA
Dibenz(a,h)anthracene	0.11		0.10	0.027	ug/L	1		8270C SIM	Total/NA
Silver	0.10	J	1.0	0.10	ug/L	1		200.8	Total Recoverable
Aluminum	1400		10	8.5	ug/L	1		200.8	Total Recoverable
Arsenic	2.3		1.0	0.90	ug/L	1		200.8	Total Recoverable
Barium	46		1.0	0.30	ug/L	1		200.8	Total Recoverable
Cadmium	1.1		1.0	0.10	ug/L	1		200.8	Total Recoverable
Cobalt	2.3		1.0	0.10	ug/L	1		200.8	Total Recoverable
Chromium	8.8		2.0	0.90	ug/L	1		200.8	Total Recoverable
Copper	28		2.0	0.50	ug/L	1		200.8	Total Recoverable
Iron	5300		20	8.0	ug/L	1		200.8	Total Recoverable
Molybdenum	4.0		2.0	0.20	ug/L	1		200.8	Total Recoverable
Nickel	9.2		2.0	0.50	ug/L	1		200.8	Total Recoverable
Lead	72		1.0	0.20	ug/L	1		200.8	Total Recoverable
Antimony	2.3		2.0	0.30	ug/L	1		200.8	Total Recoverable
Selenium	0.73	J	2.0	0.50	ug/L	1		200.8	Total Recoverable
Vanadium	11		2.0	0.80	ug/L	1		200.8	Total Recoverable
Zinc	1600		20	4.0	ug/L	1		200.8	Total Recoverable
Barium	110		1.0	0.30	ug/L	1		200.8	Dissolved
Cobalt	0.15	J	1.0	0.10	ug/L	1		200.8	Dissolved

This Detection Summary does not include radiochemical test results.

TestAmerica Pleasanton

## Detection Summary

Client: Weiss Associates  
Project/Site: LRTC Storm Envent Inspection Sampling

TestAmerica Job ID: 720-48852-1

### Client Sample ID: LRTC-SW-04 (Continued)

Lab Sample ID: 720-48852-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Chromium	1.8	J	2.0	0.90	ug/L	1			200.8	Dissolved
Copper	4.2		2.0	0.50	ug/L	1			200.8	Dissolved
Iron	12	J	20	8.0	ug/L	1			200.8	Dissolved
Molybdenum	3.4		2.0	0.20	ug/L	1			200.8	Dissolved
Nickel	0.52	J	2.0	0.50	ug/L	1			200.8	Dissolved
Lead	0.28	J	1.0	0.20	ug/L	1			200.8	Dissolved
Antimony	1.3	J	2.0	0.30	ug/L	1			200.8	Dissolved
Vanadium	1.8	J	2.0	0.80	ug/L	1			200.8	Dissolved
Zinc	120		20	4.0	ug/L	1			200.8	Dissolved
Mercury	0.00037		0.00020	0.00010	mg/L	1			245.1	Total/NA
Total Suspended Solids	63		10	10	mg/L	1			SM 2540D	Total/NA

### Client Sample ID: LRTC-SW-05

Lab Sample ID: 720-48852-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Naphthalene	0.037	J	0.10	0.031	ug/L	1			8270C SIM	Total/NA
Phenanthrene	0.20		0.10	0.031	ug/L	1			8270C SIM	Total/NA
Anthracene	0.041	J	0.10	0.030	ug/L	1			8270C SIM	Total/NA
Benzo[a]anthracene	0.27		0.10	0.028	ug/L	1			8270C SIM	Total/NA
Chrysene	0.39		0.10	0.032	ug/L	1			8270C SIM	Total/NA
Benzo[a]pyrene	0.23		0.10	0.024	ug/L	1			8270C SIM	Total/NA
Benzo[b]fluoranthene	0.20		0.10	0.031	ug/L	1			8270C SIM	Total/NA
Benzo[k]fluoranthene	0.055	J	0.10	0.035	ug/L	1			8270C SIM	Total/NA
Benzo[g,h,i]perylene	0.20		0.10	0.023	ug/L	1			8270C SIM	Total/NA
Indeno[1,2,3-cd]pyrene	0.075	J	0.10	0.028	ug/L	1			8270C SIM	Total/NA
Fluoranthene	0.32		0.10	0.031	ug/L	1			8270C SIM	Total/NA
Pyrene	0.35		0.10	0.036	ug/L	1			8270C SIM	Total/NA
Dibenz(a,h)anthracene	0.089	J	0.10	0.027	ug/L	1			8270C SIM	Total/NA
Silver	0.10	J	1.0	0.10	ug/L	1			200.8	Total Recoverable
Aluminum	1900		10	8.5	ug/L	1			200.8	Total Recoverable
Arsenic	2.8		1.0	0.90	ug/L	1			200.8	Total Recoverable
Barium	46		1.0	0.30	ug/L	1			200.8	Total Recoverable
Beryllium	0.11	J	0.50	0.10	ug/L	1			200.8	Total Recoverable
Cadmium	1.2		1.0	0.10	ug/L	1			200.8	Total Recoverable
Cobalt	3.2		1.0	0.10	ug/L	1			200.8	Total Recoverable
Chromium	10		2.0	0.90	ug/L	1			200.8	Total Recoverable
Copper	28		2.0	0.50	ug/L	1			200.8	Total Recoverable
Iron	6700		20	8.0	ug/L	1			200.8	Total Recoverable
Molybdenum	5.0		2.0	0.20	ug/L	1			200.8	Total Recoverable
Nickel	11		2.0	0.50	ug/L	1			200.8	Total Recoverable
Lead	75		1.0	0.20	ug/L	1			200.8	Total Recoverable

This Detection Summary does not include radiochemical test results.

TestAmerica Pleasanton

## Detection Summary

Client: Weiss Associates  
Project/Site: LRTC Storm Envent Inspection Sampling

TestAmerica Job ID: 720-48852-1

**Client Sample ID: LRTC-SW-05 (Continued)**

**Lab Sample ID: 720-48852-4**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	2.6		2.0	0.30	ug/L	1		200.8	Total
									Recoverable
Selenium	0.93	J	2.0	0.50	ug/L	1		200.8	Total
									Recoverable
Vanadium	15		2.0	0.80	ug/L	1		200.8	Total
									Recoverable
Zinc	410		20	4.0	ug/L	1		200.8	Total
									Recoverable
Aluminum	14		10	8.5	ug/L	1		200.8	Dissolved
Barium	120		1.0	0.30	ug/L	1		200.8	Dissolved
Cobalt	0.17	J	1.0	0.10	ug/L	1		200.8	Dissolved
Chromium	2.5		2.0	0.90	ug/L	1		200.8	Dissolved
Copper	4.1		2.0	0.50	ug/L	1		200.8	Dissolved
Iron	11	J	20	8.0	ug/L	1		200.8	Dissolved
Molybdenum	4.5		2.0	0.20	ug/L	1		200.8	Dissolved
Nickel	0.69	J	2.0	0.50	ug/L	1		200.8	Dissolved
Lead	0.20	J	1.0	0.20	ug/L	1		200.8	Dissolved
Antimony	1.6	J	2.0	0.30	ug/L	1		200.8	Dissolved
Selenium	0.51	J	2.0	0.50	ug/L	1		200.8	Dissolved
Vanadium	2.1		2.0	0.80	ug/L	1		200.8	Dissolved
Zinc	22		20	4.0	ug/L	1		200.8	Dissolved
Mercury	0.00047		0.00020	0.00010	mg/L	1		245.1	Total/NA
Total Suspended Solids	140		10	10	mg/L	1		SM 2540D	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Pleasanton



# Client Sample Results

Client: Weiss Associates  
Project/Site: LRTC Storm Envent Inspection Sampling

TestAmerica Job ID: 720-48852-1

**Client Sample ID: LRTC-SW-02**

**Lab Sample ID: 720-48852-1**

**Date Collected: 04/04/13 07:55**

**Matrix: Water**

**Date Received: 04/04/13 17:00**

## Method: 8270C SIM - PAHs by GCMS (SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	0.14		0.11	0.033	ug/L		04/10/13 08:47	04/10/13 21:45	1
Acenaphthene	ND		0.11	0.038	ug/L		04/10/13 08:47	04/10/13 21:45	1
Acenaphthylene	ND		0.11	0.038	ug/L		04/10/13 08:47	04/10/13 21:45	1
Fluorene	0.070	J	0.11	0.034	ug/L		04/10/13 08:47	04/10/13 21:45	1
Phenanthrene	0.69		0.11	0.033	ug/L		04/10/13 08:47	04/10/13 21:45	1
Anthracene	0.22		0.11	0.032	ug/L		04/10/13 08:47	04/10/13 21:45	1
Benzo[a]anthracene	1.6		0.11	0.029	ug/L		04/10/13 08:47	04/10/13 21:45	1
Chrysene	2.3		0.11	0.034	ug/L		04/10/13 08:47	04/10/13 21:45	1
Benzo[a]pyrene	1.9		0.11	0.025	ug/L		04/10/13 08:47	04/10/13 21:45	1
Benzo[b]fluoranthene	1.0		0.11	0.033	ug/L		04/10/13 08:47	04/10/13 21:45	1
Benzo[k]fluoranthene	0.31		0.11	0.037	ug/L		04/10/13 08:47	04/10/13 21:45	1
Benzo[g,h,i]perylene	1.6		0.11	0.024	ug/L		04/10/13 08:47	04/10/13 21:45	1
Indeno[1,2,3-cd]pyrene	0.49		0.11	0.029	ug/L		04/10/13 08:47	04/10/13 21:45	1
Fluoranthene	0.26		0.11	0.033	ug/L		04/10/13 08:47	04/10/13 21:45	1
Pyrene	0.99		0.11	0.038	ug/L		04/10/13 08:47	04/10/13 21:45	1
Dibenz(a,h)anthracene	0.81		0.11	0.028	ug/L		04/10/13 08:47	04/10/13 21:45	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	71		29 - 120				04/10/13 08:47	04/10/13 21:45	1
Terphenyl-d14	85		45 - 120				04/10/13 08:47	04/10/13 21:45	1

## Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.11	0.037	ug/L		04/11/13 08:12	04/11/13 17:37	1
Acenaphthylene	ND		0.11	0.037	ug/L		04/11/13 08:12	04/11/13 17:37	1
Anthracene	ND		0.11	0.031	ug/L		04/11/13 08:12	04/11/13 17:37	1
Benzo[a]anthracene	ND		0.11	0.029	ug/L		04/11/13 08:12	04/11/13 17:37	1
Benzo[a]pyrene	ND		0.11	0.024	ug/L		04/11/13 08:12	04/11/13 17:37	1
Benzo[b]fluoranthene	ND		0.11	0.032	ug/L		04/11/13 08:12	04/11/13 17:37	1
Benzo[g,h,i]perylene	ND		0.11	0.023	ug/L		04/11/13 08:12	04/11/13 17:37	1
Benzo[k]fluoranthene	ND		0.11	0.036	ug/L		04/11/13 08:12	04/11/13 17:37	1
Chrysene	ND		0.11	0.033	ug/L		04/11/13 08:12	04/11/13 17:37	1
Dibenz(a,h)anthracene	ND		0.11	0.028	ug/L		04/11/13 08:12	04/11/13 17:37	1
Fluoranthene	ND		0.11	0.032	ug/L		04/11/13 08:12	04/11/13 17:37	1
Fluorene	ND		0.11	0.033	ug/L		04/11/13 08:12	04/11/13 17:37	1
Indeno[1,2,3-cd]pyrene	ND		0.11	0.029	ug/L		04/11/13 08:12	04/11/13 17:37	1
Naphthalene	ND		0.11	0.032	ug/L		04/11/13 08:12	04/11/13 17:37	1
Phenanthrene	ND		0.11	0.032	ug/L		04/11/13 08:12	04/11/13 17:37	1
Pyrene	ND		0.11	0.037	ug/L		04/11/13 08:12	04/11/13 17:37	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	71		29 - 120				04/11/13 08:12	04/11/13 17:37	1
Terphenyl-d14	77		45 - 120				04/11/13 08:12	04/11/13 17:37	1

## Method: 200.8 - ICPMS Total Metals - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		1.0	0.10	ug/L		04/09/13 13:18	04/09/13 17:42	1
Aluminum	300		10	8.5	ug/L		04/09/13 13:18	04/09/13 17:42	1
Arsenic	1.2		1.0	0.90	ug/L		04/09/13 13:18	04/09/13 17:42	1
Barium	14		1.0	0.30	ug/L		04/09/13 13:18	04/09/13 17:42	1

TestAmerica Pleasanton

# Client Sample Results

Client: Weiss Associates  
Project/Site: LRTC Storm Envent Inspection Sampling

TestAmerica Job ID: 720-48852-1

**Client Sample ID: LRTC-SW-02**

**Lab Sample ID: 720-48852-1**

**Date Collected: 04/04/13 07:55**

**Matrix: Water**

**Date Received: 04/04/13 17:00**

## Method: 200.8 - ICPMS Total Metals - Total Recoverable (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		0.50	0.10	ug/L		04/09/13 13:18	04/09/13 17:42	1
Cadmium	ND		1.0	0.10	ug/L		04/09/13 13:18	04/09/13 17:42	1
Cobalt	0.36	J	1.0	0.10	ug/L		04/09/13 13:18	04/09/13 17:42	1
Chromium	4.1		2.0	0.90	ug/L		04/09/13 13:18	04/09/13 17:42	1
Copper	2.9		2.0	0.50	ug/L		04/09/13 13:18	04/09/13 17:42	1
Iron	560		20	8.0	ug/L		04/09/13 13:18	04/09/13 18:39	1
Molybdenum	4.6		2.0	0.20	ug/L		04/09/13 13:18	04/09/13 17:42	1
Nickel	4.1		2.0	0.50	ug/L		04/09/13 13:18	04/09/13 17:42	1
Lead	2.4		1.0	0.20	ug/L		04/09/13 13:18	04/09/13 17:42	1
Antimony	7.1		2.0	0.30	ug/L		04/09/13 13:18	04/09/13 17:42	1
Selenium	1.2	J	2.0	0.50	ug/L		04/09/13 13:18	04/09/13 17:42	1
Thallium	ND		1.0	0.20	ug/L		04/09/13 13:18	04/09/13 17:42	1
Vanadium	65		2.0	0.80	ug/L		04/09/13 13:18	04/09/13 17:42	1
Zinc	33		20	4.0	ug/L		04/09/13 13:18	04/09/13 18:39	1

## Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		1.0	0.10	ug/L		04/09/13 14:22	04/09/13 20:01	1
Aluminum	ND		10	8.5	ug/L		04/09/13 14:22	04/09/13 20:01	1
Arsenic	ND		1.0	0.90	ug/L		04/09/13 14:22	04/09/13 19:31	1
Barium	79		1.0	0.30	ug/L		04/09/13 14:22	04/09/13 19:31	1
Beryllium	ND		0.50	0.10	ug/L		04/09/13 14:22	04/09/13 19:31	1
Cadmium	ND		1.0	0.10	ug/L		04/09/13 14:22	04/09/13 19:31	1
Cobalt	ND		1.0	0.10	ug/L		04/09/13 14:22	04/09/13 19:31	1
Chromium	2.6		2.0	0.90	ug/L		04/09/13 14:22	04/09/13 19:31	1
Copper	1.2	J	2.0	0.50	ug/L		04/09/13 14:22	04/09/13 19:31	1
Iron	11	J	20	8.0	ug/L		04/09/13 14:22	04/09/13 19:31	1
Molybdenum	4.5		2.0	0.20	ug/L		04/09/13 14:22	04/09/13 19:31	1
Nickel	ND		2.0	0.50	ug/L		04/09/13 14:22	04/09/13 19:31	1
Lead	ND		1.0	0.20	ug/L		04/09/13 14:22	04/09/13 19:31	1
Antimony	6.9		2.0	0.30	ug/L		04/09/13 14:22	04/09/13 19:31	1
Selenium	0.56	J	2.0	0.50	ug/L		04/09/13 14:22	04/09/13 19:31	1
Thallium	0.23	J	1.0	0.20	ug/L		04/09/13 14:22	04/09/13 19:31	1
Vanadium	61		2.0	0.80	ug/L		04/09/13 14:22	04/09/13 19:31	1
Zinc	26		20	4.0	ug/L		04/09/13 14:22	04/09/13 19:31	1

## Method: 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00010	mg/L		04/10/13 10:40	04/10/13 13:32	1

## Method: 245.1 - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00010	mg/L		04/10/13 10:40	04/10/13 13:55	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	46		10	10	mg/L			04/09/13 18:34	1

TestAmerica Pleasanton

# Client Sample Results

Client: Weiss Associates  
Project/Site: LRTC Storm Envent Inspection Sampling

TestAmerica Job ID: 720-48852-1

**Client Sample ID: LRTC-SW-03**

**Lab Sample ID: 720-48852-2**

Date Collected: 04/04/13 08:35

Matrix: Water

Date Received: 04/04/13 17:00

## Method: 8270C SIM - PAHs by GCMS (SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	0.12		0.11	0.032	ug/L		04/10/13 08:47	04/10/13 22:08	1
Acenaphthene	ND		0.11	0.037	ug/L		04/10/13 08:47	04/10/13 22:08	1
Acenaphthylene	ND		0.11	0.037	ug/L		04/10/13 08:47	04/10/13 22:08	1
Fluorene	0.059	J	0.11	0.033	ug/L		04/10/13 08:47	04/10/13 22:08	1
Phenanthrene	0.54		0.11	0.032	ug/L		04/10/13 08:47	04/10/13 22:08	1
Anthracene	0.24		0.11	0.031	ug/L		04/10/13 08:47	04/10/13 22:08	1
Benzo[a]anthracene	1.2		0.11	0.028	ug/L		04/10/13 08:47	04/10/13 22:08	1
Chrysene	1.6		0.11	0.033	ug/L		04/10/13 08:47	04/10/13 22:08	1
Benzo[a]pyrene	1.4		0.11	0.024	ug/L		04/10/13 08:47	04/10/13 22:08	1
Benzo[b]fluoranthene	0.74		0.11	0.032	ug/L		04/10/13 08:47	04/10/13 22:08	1
Benzo[k]fluoranthene	0.20		0.11	0.036	ug/L		04/10/13 08:47	04/10/13 22:08	1
Benzo[g,h,i]perylene	1.1		0.11	0.023	ug/L		04/10/13 08:47	04/10/13 22:08	1
Indeno[1,2,3-cd]pyrene	0.34		0.11	0.028	ug/L		04/10/13 08:47	04/10/13 22:08	1
Fluoranthene	0.20		0.11	0.032	ug/L		04/10/13 08:47	04/10/13 22:08	1
Pyrene	0.73		0.11	0.037	ug/L		04/10/13 08:47	04/10/13 22:08	1
Dibenz(a,h)anthracene	0.56		0.11	0.027	ug/L		04/10/13 08:47	04/10/13 22:08	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
2-Fluorobiphenyl	75		29 - 120				04/10/13 08:47	04/10/13 22:08	1
Terphenyl-d14	82		45 - 120				04/10/13 08:47	04/10/13 22:08	1

## Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.10	0.036	ug/L		04/11/13 08:15	04/11/13 15:41	1
Acenaphthylene	ND		0.10	0.036	ug/L		04/11/13 08:15	04/11/13 15:41	1
Anthracene	ND		0.10	0.030	ug/L		04/11/13 08:15	04/11/13 15:41	1
Benzo[a]anthracene	0.030	J	0.10	0.028	ug/L		04/11/13 08:15	04/11/13 15:41	1
Benzo[a]pyrene	0.035	J	0.10	0.024	ug/L		04/11/13 08:15	04/11/13 15:41	1
Benzo[b]fluoranthene	ND		0.10	0.031	ug/L		04/11/13 08:15	04/11/13 15:41	1
Benzo[g,h,i]perylene	ND		0.10	0.023	ug/L		04/11/13 08:15	04/11/13 15:41	1
Benzo[k]fluoranthene	ND		0.10	0.035	ug/L		04/11/13 08:15	04/11/13 15:41	1
Chrysene	ND		0.10	0.032	ug/L		04/11/13 08:15	04/11/13 15:41	1
Dibenz(a,h)anthracene	ND		0.10	0.027	ug/L		04/11/13 08:15	04/11/13 15:41	1
Fluoranthene	ND		0.10	0.031	ug/L		04/11/13 08:15	04/11/13 15:41	1
Fluorene	ND		0.10	0.032	ug/L		04/11/13 08:15	04/11/13 15:41	1
Indeno[1,2,3-cd]pyrene	ND		0.10	0.028	ug/L		04/11/13 08:15	04/11/13 15:41	1
Naphthalene	ND		0.10	0.031	ug/L		04/11/13 08:15	04/11/13 15:41	1
Phenanthrene	ND		0.10	0.031	ug/L		04/11/13 08:15	04/11/13 15:41	1
Pyrene	ND		0.10	0.036	ug/L		04/11/13 08:15	04/11/13 15:41	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
2-Fluorobiphenyl	61		29 - 120				04/11/13 08:15	04/11/13 15:41	1
Terphenyl-d14	70		45 - 120				04/11/13 08:15	04/11/13 15:41	1

## Method: 200.8 - ICPMS Total Metals - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		1.0	0.10	ug/L		04/09/13 13:18	04/09/13 17:49	1
Aluminum	130		10	8.5	ug/L		04/09/13 13:18	04/09/13 17:49	1
Arsenic	0.99	J	1.0	0.90	ug/L		04/09/13 13:18	04/09/13 17:49	1
Barium	12		1.0	0.30	ug/L		04/09/13 13:18	04/09/13 17:49	1

TestAmerica Pleasanton

# Client Sample Results

Client: Weiss Associates  
Project/Site: LRTC Storm Envent Inspection Sampling

TestAmerica Job ID: 720-48852-1

**Client Sample ID: LRTC-SW-03**

**Lab Sample ID: 720-48852-2**

**Date Collected: 04/04/13 08:35**

**Matrix: Water**

**Date Received: 04/04/13 17:00**

## Method: 200.8 - ICPMS Total Metals - Total Recoverable (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		0.50	0.10	ug/L		04/09/13 13:18	04/09/13 17:49	1
Cadmium	ND		1.0	0.10	ug/L		04/09/13 13:18	04/09/13 17:49	1
Cobalt	0.21	J	1.0	0.10	ug/L		04/09/13 13:18	04/09/13 17:49	1
Chromium	3.2		2.0	0.90	ug/L		04/09/13 13:18	04/09/13 17:49	1
Copper	1.9	J	2.0	0.50	ug/L		04/09/13 13:18	04/09/13 17:49	1
Iron	220		20	8.0	ug/L		04/09/13 13:18	04/09/13 18:47	1
Molybdenum	5.0		2.0	0.20	ug/L		04/09/13 13:18	04/09/13 17:49	1
Nickel	2.4		2.0	0.50	ug/L		04/09/13 13:18	04/09/13 17:49	1
Lead	1.1		1.0	0.20	ug/L		04/09/13 13:18	04/09/13 17:49	1
Antimony	7.8		2.0	0.30	ug/L		04/09/13 13:18	04/09/13 17:49	1
Selenium	1.4	J	2.0	0.50	ug/L		04/09/13 13:18	04/09/13 17:49	1
Thallium	ND		1.0	0.20	ug/L		04/09/13 13:18	04/09/13 17:49	1
Vanadium	77		2.0	0.80	ug/L		04/09/13 13:18	04/09/13 17:49	1
Zinc	17	J	20	4.0	ug/L		04/09/13 13:18	04/09/13 18:47	1

## Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		1.0	0.10	ug/L		04/09/13 14:22	04/09/13 20:07	1
Aluminum	ND		10	8.5	ug/L		04/09/13 14:22	04/09/13 20:07	1
Arsenic	0.90	J	1.0	0.90	ug/L		04/09/13 14:22	04/09/13 19:39	1
Barium	71		1.0	0.30	ug/L		04/09/13 14:22	04/09/13 19:39	1
Beryllium	ND		0.50	0.10	ug/L		04/09/13 14:22	04/09/13 19:39	1
Cadmium	ND		1.0	0.10	ug/L		04/09/13 14:22	04/09/13 19:39	1
Cobalt	0.10	J	1.0	0.10	ug/L		04/09/13 14:22	04/09/13 19:39	1
Chromium	2.4		2.0	0.90	ug/L		04/09/13 14:22	04/09/13 19:39	1
Copper	1.0	J	2.0	0.50	ug/L		04/09/13 14:22	04/09/13 19:39	1
Iron	14	J	20	8.0	ug/L		04/09/13 14:22	04/09/13 19:39	1
Molybdenum	4.8		2.0	0.20	ug/L		04/09/13 14:22	04/09/13 19:39	1
Nickel	0.51	J	2.0	0.50	ug/L		04/09/13 14:22	04/09/13 19:39	1
Lead	ND		1.0	0.20	ug/L		04/09/13 14:22	04/09/13 19:39	1
Antimony	7.5		2.0	0.30	ug/L		04/09/13 14:22	04/09/13 19:39	1
Selenium	0.98	J	2.0	0.50	ug/L		04/09/13 14:22	04/09/13 19:39	1
Thallium	ND		1.0	0.20	ug/L		04/09/13 14:22	04/09/13 19:39	1
Vanadium	72		2.0	0.80	ug/L		04/09/13 14:22	04/09/13 19:39	1
Zinc	26		20	4.0	ug/L		04/09/13 14:22	04/09/13 19:39	1

## Method: 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00010	mg/L		04/10/13 10:40	04/10/13 13:39	1

## Method: 245.1 - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00010	mg/L		04/10/13 10:40	04/10/13 14:02	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	20		10	10	mg/L			04/09/13 18:36	1

TestAmerica Pleasanton

# Client Sample Results

Client: Weiss Associates  
Project/Site: LRTC Storm Envent Inspection Sampling

TestAmerica Job ID: 720-48852-1

**Client Sample ID: LRTC-SW-04**

**Lab Sample ID: 720-48852-3**

**Date Collected: 04/04/13 09:05**

**Matrix: Water**

**Date Received: 04/04/13 17:00**

## Method: 8270C SIM - PAHs by GCMS (SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	0.038	J	0.10	0.031	ug/L		04/10/13 08:47	04/10/13 22:31	1
Acenaphthene	ND		0.10	0.036	ug/L		04/10/13 08:47	04/10/13 22:31	1
Acenaphthylene	ND		0.10	0.036	ug/L		04/10/13 08:47	04/10/13 22:31	1
Fluorene	ND		0.10	0.032	ug/L		04/10/13 08:47	04/10/13 22:31	1
Phenanthrene	0.22		0.10	0.031	ug/L		04/10/13 08:47	04/10/13 22:31	1
Anthracene	0.056	J	0.10	0.030	ug/L		04/10/13 08:47	04/10/13 22:31	1
Benzo[a]anthracene	0.27		0.10	0.028	ug/L		04/10/13 08:47	04/10/13 22:31	1
Chrysene	0.42		0.10	0.032	ug/L		04/10/13 08:47	04/10/13 22:31	1
Benzo[a]pyrene	0.25		0.10	0.023	ug/L		04/10/13 08:47	04/10/13 22:31	1
Benzo[b]fluoranthene	0.23		0.10	0.031	ug/L		04/10/13 08:47	04/10/13 22:31	1
Benzo[k]fluoranthene	0.055	J	0.10	0.035	ug/L		04/10/13 08:47	04/10/13 22:31	1
Benzo[g,h,i]perylene	0.23		0.10	0.022	ug/L		04/10/13 08:47	04/10/13 22:31	1
Indeno[1,2,3-cd]pyrene	0.086	J	0.10	0.028	ug/L		04/10/13 08:47	04/10/13 22:31	1
Fluoranthene	0.29		0.10	0.031	ug/L		04/10/13 08:47	04/10/13 22:31	1
Pyrene	0.32		0.10	0.036	ug/L		04/10/13 08:47	04/10/13 22:31	1
Dibenz(a,h)anthracene	0.11		0.10	0.027	ug/L		04/10/13 08:47	04/10/13 22:31	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
2-Fluorobiphenyl	66		29 - 120				04/10/13 08:47	04/10/13 22:31	1
Terphenyl-d14	62		45 - 120				04/10/13 08:47	04/10/13 22:31	1

## Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.11	0.038	ug/L		04/11/13 08:15	04/11/13 16:04	1
Acenaphthylene	ND		0.11	0.038	ug/L		04/11/13 08:15	04/11/13 16:04	1
Anthracene	ND		0.11	0.032	ug/L		04/11/13 08:15	04/11/13 16:04	1
Benzo[a]anthracene	ND		0.11	0.030	ug/L		04/11/13 08:15	04/11/13 16:04	1
Benzo[a]pyrene	ND		0.11	0.025	ug/L		04/11/13 08:15	04/11/13 16:04	1
Benzo[b]fluoranthene	ND		0.11	0.033	ug/L		04/11/13 08:15	04/11/13 16:04	1
Benzo[g,h,i]perylene	ND		0.11	0.024	ug/L		04/11/13 08:15	04/11/13 16:04	1
Benzo[k]fluoranthene	ND		0.11	0.037	ug/L		04/11/13 08:15	04/11/13 16:04	1
Chrysene	ND		0.11	0.034	ug/L		04/11/13 08:15	04/11/13 16:04	1
Dibenz(a,h)anthracene	ND		0.11	0.029	ug/L		04/11/13 08:15	04/11/13 16:04	1
Fluoranthene	ND		0.11	0.033	ug/L		04/11/13 08:15	04/11/13 16:04	1
Fluorene	ND		0.11	0.034	ug/L		04/11/13 08:15	04/11/13 16:04	1
Indeno[1,2,3-cd]pyrene	ND		0.11	0.030	ug/L		04/11/13 08:15	04/11/13 16:04	1
Naphthalene	ND		0.11	0.033	ug/L		04/11/13 08:15	04/11/13 16:04	1
Phenanthrene	ND		0.11	0.033	ug/L		04/11/13 08:15	04/11/13 16:04	1
Pyrene	ND		0.11	0.038	ug/L		04/11/13 08:15	04/11/13 16:04	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
2-Fluorobiphenyl	62		29 - 120				04/11/13 08:15	04/11/13 16:04	1
Terphenyl-d14	71		45 - 120				04/11/13 08:15	04/11/13 16:04	1

## Method: 200.8 - ICPMS Total Metals - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.10	J	1.0	0.10	ug/L		04/09/13 13:18	04/09/13 17:51	1
Aluminum	1400		10	8.5	ug/L		04/09/13 13:18	04/09/13 17:51	1
Arsenic	2.3		1.0	0.90	ug/L		04/09/13 13:18	04/09/13 17:51	1
Barium	46		1.0	0.30	ug/L		04/09/13 13:18	04/09/13 17:51	1

TestAmerica Pleasanton

# Client Sample Results

Client: Weiss Associates  
Project/Site: LRTC Storm Envent Inspection Sampling

TestAmerica Job ID: 720-48852-1

**Client Sample ID: LRTC-SW-04**

**Lab Sample ID: 720-48852-3**

**Date Collected: 04/04/13 09:05**

**Matrix: Water**

**Date Received: 04/04/13 17:00**

## Method: 200.8 - ICPMS Total Metals - Total Recoverable (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		0.50	0.10	ug/L		04/09/13 13:18	04/09/13 17:51	1
Cadmium	1.1		1.0	0.10	ug/L		04/09/13 13:18	04/09/13 17:51	1
Cobalt	2.3		1.0	0.10	ug/L		04/09/13 13:18	04/09/13 17:51	1
Chromium	8.8		2.0	0.90	ug/L		04/09/13 13:18	04/09/13 17:51	1
Copper	28		2.0	0.50	ug/L		04/09/13 13:18	04/09/13 17:51	1
Iron	5300		20	8.0	ug/L		04/09/13 13:18	04/09/13 18:49	1
Molybdenum	4.0		2.0	0.20	ug/L		04/09/13 13:18	04/09/13 17:51	1
Nickel	9.2		2.0	0.50	ug/L		04/09/13 13:18	04/09/13 17:51	1
Lead	72		1.0	0.20	ug/L		04/09/13 13:18	04/09/13 17:51	1
Antimony	2.3		2.0	0.30	ug/L		04/09/13 13:18	04/09/13 17:51	1
Selenium	0.73	J	2.0	0.50	ug/L		04/09/13 13:18	04/09/13 17:51	1
Thallium	ND		1.0	0.20	ug/L		04/09/13 13:18	04/09/13 17:51	1
Vanadium	11		2.0	0.80	ug/L		04/09/13 13:18	04/09/13 17:51	1
Zinc	1600		20	4.0	ug/L		04/09/13 13:18	04/09/13 18:49	1

## Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		1.0	0.10	ug/L		04/09/13 14:22	04/09/13 20:09	1
Aluminum	ND		10	8.5	ug/L		04/09/13 14:22	04/09/13 20:09	1
Arsenic	ND		1.0	0.90	ug/L		04/09/13 14:22	04/09/13 19:42	1
Barium	110		1.0	0.30	ug/L		04/09/13 14:22	04/09/13 19:42	1
Beryllium	ND		0.50	0.10	ug/L		04/09/13 14:22	04/09/13 19:42	1
Cadmium	ND		1.0	0.10	ug/L		04/09/13 14:22	04/09/13 19:42	1
Cobalt	0.15	J	1.0	0.10	ug/L		04/09/13 14:22	04/09/13 19:42	1
Chromium	1.8	J	2.0	0.90	ug/L		04/09/13 14:22	04/09/13 19:42	1
Copper	4.2		2.0	0.50	ug/L		04/09/13 14:22	04/09/13 19:42	1
Iron	12	J	20	8.0	ug/L		04/09/13 14:22	04/09/13 19:42	1
Molybdenum	3.4		2.0	0.20	ug/L		04/09/13 14:22	04/09/13 19:42	1
Nickel	0.52	J	2.0	0.50	ug/L		04/09/13 14:22	04/09/13 19:42	1
Lead	0.28	J	1.0	0.20	ug/L		04/09/13 14:22	04/09/13 19:42	1
Antimony	1.3	J	2.0	0.30	ug/L		04/09/13 14:22	04/09/13 19:42	1
Selenium	ND		2.0	0.50	ug/L		04/09/13 14:22	04/09/13 19:42	1
Thallium	ND		1.0	0.20	ug/L		04/09/13 14:22	04/09/13 19:42	1
Vanadium	1.8	J	2.0	0.80	ug/L		04/09/13 14:22	04/09/13 19:42	1
Zinc	120		20	4.0	ug/L		04/09/13 14:22	04/09/13 19:42	1

## Method: 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00037		0.00020	0.00010	mg/L		04/10/13 10:40	04/10/13 13:42	1

## Method: 245.1 - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00010	mg/L		04/10/13 10:40	04/10/13 14:04	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	63		10	10	mg/L			04/09/13 18:37	1

TestAmerica Pleasanton

# Client Sample Results

Client: Weiss Associates  
Project/Site: LRTC Storm Envent Inspection Sampling

TestAmerica Job ID: 720-48852-1

**Client Sample ID: LRTC-SW-05**

**Lab Sample ID: 720-48852-4**

**Date Collected: 04/04/13 09:20**

**Matrix: Water**

**Date Received: 04/04/13 17:00**

## Method: 8270C SIM - PAHs by GCMS (SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	0.037	J	0.10	0.031	ug/L		04/10/13 08:47	04/10/13 21:22	1
Acenaphthene	ND		0.10	0.036	ug/L		04/10/13 08:47	04/10/13 21:22	1
Acenaphthylene	ND		0.10	0.036	ug/L		04/10/13 08:47	04/10/13 21:22	1
Fluorene	ND		0.10	0.032	ug/L		04/10/13 08:47	04/10/13 21:22	1
Phenanthrene	0.20		0.10	0.031	ug/L		04/10/13 08:47	04/10/13 21:22	1
Anthracene	0.041	J	0.10	0.030	ug/L		04/10/13 08:47	04/10/13 21:22	1
Benzo[a]anthracene	0.27		0.10	0.028	ug/L		04/10/13 08:47	04/10/13 21:22	1
Chrysene	0.39		0.10	0.032	ug/L		04/10/13 08:47	04/10/13 21:22	1
Benzo[a]pyrene	0.23		0.10	0.024	ug/L		04/10/13 08:47	04/10/13 21:22	1
Benzo[b]fluoranthene	0.20		0.10	0.031	ug/L		04/10/13 08:47	04/10/13 21:22	1
Benzo[k]fluoranthene	0.055	J	0.10	0.035	ug/L		04/10/13 08:47	04/10/13 21:22	1
Benzo[g,h,i]perylene	0.20		0.10	0.023	ug/L		04/10/13 08:47	04/10/13 21:22	1
Indeno[1,2,3-cd]pyrene	0.075	J	0.10	0.028	ug/L		04/10/13 08:47	04/10/13 21:22	1
Fluoranthene	0.32		0.10	0.031	ug/L		04/10/13 08:47	04/10/13 21:22	1
Pyrene	0.35		0.10	0.036	ug/L		04/10/13 08:47	04/10/13 21:22	1
Dibenz(a,h)anthracene	0.089	J	0.10	0.027	ug/L		04/10/13 08:47	04/10/13 21:22	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
2-Fluorobiphenyl	64		29 - 120				04/10/13 08:47	04/10/13 21:22	1
Terphenyl-d14	57		45 - 120				04/10/13 08:47	04/10/13 21:22	1

## Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.11	0.038	ug/L		04/11/13 08:12	04/11/13 18:00	1
Acenaphthylene	ND		0.11	0.038	ug/L		04/11/13 08:12	04/11/13 18:00	1
Anthracene	ND		0.11	0.031	ug/L		04/11/13 08:12	04/11/13 18:00	1
Benzo[a]anthracene	ND		0.11	0.029	ug/L		04/11/13 08:12	04/11/13 18:00	1
Benzo[a]pyrene	ND		0.11	0.025	ug/L		04/11/13 08:12	04/11/13 18:00	1
Benzo[b]fluoranthene	ND		0.11	0.032	ug/L		04/11/13 08:12	04/11/13 18:00	1
Benzo[g,h,i]perylene	ND		0.11	0.024	ug/L		04/11/13 08:12	04/11/13 18:00	1
Benzo[k]fluoranthene	ND		0.11	0.037	ug/L		04/11/13 08:12	04/11/13 18:00	1
Chrysene	ND		0.11	0.033	ug/L		04/11/13 08:12	04/11/13 18:00	1
Dibenz(a,h)anthracene	ND		0.11	0.028	ug/L		04/11/13 08:12	04/11/13 18:00	1
Fluoranthene	ND		0.11	0.032	ug/L		04/11/13 08:12	04/11/13 18:00	1
Fluorene	ND		0.11	0.033	ug/L		04/11/13 08:12	04/11/13 18:00	1
Indeno[1,2,3-cd]pyrene	ND		0.11	0.029	ug/L		04/11/13 08:12	04/11/13 18:00	1
Naphthalene	ND		0.11	0.032	ug/L		04/11/13 08:12	04/11/13 18:00	1
Phenanthrene	ND		0.11	0.032	ug/L		04/11/13 08:12	04/11/13 18:00	1
Pyrene	ND		0.11	0.038	ug/L		04/11/13 08:12	04/11/13 18:00	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
2-Fluorobiphenyl	71		29 - 120				04/11/13 08:12	04/11/13 18:00	1
Terphenyl-d14	76		45 - 120				04/11/13 08:12	04/11/13 18:00	1

## Method: 200.8 - ICPMS Total Metals - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.10	J	1.0	0.10	ug/L		04/09/13 13:18	04/09/13 17:53	1
Aluminum	1900		10	8.5	ug/L		04/09/13 13:18	04/09/13 17:53	1
Arsenic	2.8		1.0	0.90	ug/L		04/09/13 13:18	04/09/13 17:53	1
Barium	46		1.0	0.30	ug/L		04/09/13 13:18	04/09/13 17:53	1

TestAmerica Pleasanton



# Client Sample Results

Client: Weiss Associates  
Project/Site: LRTC Storm Envent Inspection Sampling

TestAmerica Job ID: 720-48852-1

**Client Sample ID: LRTC-SW-05**

**Lab Sample ID: 720-48852-4**

**Date Collected: 04/04/13 09:20**

**Matrix: Water**

**Date Received: 04/04/13 17:00**

## Method: 200.8 - ICPMS Total Metals - Total Recoverable (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	0.11	J	0.50	0.10	ug/L		04/09/13 13:18	04/09/13 17:53	1
Cadmium	1.2		1.0	0.10	ug/L		04/09/13 13:18	04/09/13 17:53	1
Cobalt	3.2		1.0	0.10	ug/L		04/09/13 13:18	04/09/13 17:53	1
Chromium	10		2.0	0.90	ug/L		04/09/13 13:18	04/09/13 17:53	1
Copper	28		2.0	0.50	ug/L		04/09/13 13:18	04/09/13 17:53	1
Iron	6700		20	8.0	ug/L		04/09/13 13:18	04/09/13 18:52	1
Molybdenum	5.0		2.0	0.20	ug/L		04/09/13 13:18	04/09/13 17:53	1
Nickel	11		2.0	0.50	ug/L		04/09/13 13:18	04/09/13 17:53	1
Lead	75		1.0	0.20	ug/L		04/09/13 13:18	04/09/13 17:53	1
Antimony	2.6		2.0	0.30	ug/L		04/09/13 13:18	04/09/13 17:53	1
Selenium	0.93	J	2.0	0.50	ug/L		04/09/13 13:18	04/09/13 17:53	1
Thallium	ND		1.0	0.20	ug/L		04/09/13 13:18	04/09/13 17:53	1
Vanadium	15		2.0	0.80	ug/L		04/09/13 13:18	04/09/13 17:53	1
Zinc	410		20	4.0	ug/L		04/09/13 13:18	04/09/13 18:52	1

## Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		1.0	0.10	ug/L		04/09/13 14:22	04/09/13 20:12	1
Aluminum	14		10	8.5	ug/L		04/09/13 14:22	04/09/13 20:12	1
Arsenic	ND		1.0	0.90	ug/L		04/09/13 14:22	04/09/13 19:44	1
Barium	120		1.0	0.30	ug/L		04/09/13 14:22	04/09/13 19:44	1
Beryllium	ND		0.50	0.10	ug/L		04/09/13 14:22	04/09/13 19:44	1
Cadmium	ND		1.0	0.10	ug/L		04/09/13 14:22	04/09/13 19:44	1
Cobalt	0.17	J	1.0	0.10	ug/L		04/09/13 14:22	04/09/13 19:44	1
Chromium	2.5		2.0	0.90	ug/L		04/09/13 14:22	04/09/13 19:44	1
Copper	4.1		2.0	0.50	ug/L		04/09/13 14:22	04/09/13 19:44	1
Iron	11	J	20	8.0	ug/L		04/09/13 14:22	04/09/13 19:44	1
Molybdenum	4.5		2.0	0.20	ug/L		04/09/13 14:22	04/09/13 19:44	1
Nickel	0.69	J	2.0	0.50	ug/L		04/09/13 14:22	04/09/13 19:44	1
Lead	0.20	J	1.0	0.20	ug/L		04/09/13 14:22	04/09/13 19:44	1
Antimony	1.6	J	2.0	0.30	ug/L		04/09/13 14:22	04/09/13 19:44	1
Selenium	0.51	J	2.0	0.50	ug/L		04/09/13 14:22	04/09/13 19:44	1
Thallium	ND		1.0	0.20	ug/L		04/09/13 14:22	04/09/13 19:44	1
Vanadium	2.1		2.0	0.80	ug/L		04/09/13 14:22	04/09/13 19:44	1
Zinc	22		20	4.0	ug/L		04/09/13 14:22	04/09/13 19:44	1

## Method: 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00047		0.00020	0.00010	mg/L		04/10/13 10:40	04/10/13 13:44	1

## Method: 245.1 - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00010	mg/L		04/10/13 10:40	04/10/13 14:07	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	140		10	10	mg/L			04/09/13 18:40	1

TestAmerica Pleasanton



# QC Sample Results

Client: Weiss Associates  
Project/Site: LRTC Storm Envent Inspection Sampling

TestAmerica Job ID: 720-48852-1

## Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Lab Sample ID: MB 720-133853/1-B

Matrix: Water

Analysis Batch: 134167

Client Sample ID: Method Blank

Prep Type: Dissolved

Prep Batch: 134147

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.10	0.035	ug/L		04/11/13 08:12	04/11/13 17:14	1
Acenaphthylene	ND		0.10	0.035	ug/L		04/11/13 08:12	04/11/13 17:14	1
Anthracene	ND		0.10	0.029	ug/L		04/11/13 08:12	04/11/13 17:14	1
Benzo[a]anthracene	ND		0.10	0.027	ug/L		04/11/13 08:12	04/11/13 17:14	1
Benzo[a]pyrene	ND		0.10	0.023	ug/L		04/11/13 08:12	04/11/13 17:14	1
Chrysene	ND		0.10	0.031	ug/L		04/11/13 08:12	04/11/13 17:14	1
Benzo[b]fluoranthene	ND		0.10	0.030	ug/L		04/11/13 08:12	04/11/13 17:14	1
Benzo[k]fluoranthene	ND		0.10	0.034	ug/L		04/11/13 08:12	04/11/13 17:14	1
Benzo[g,h,i]perylene	ND		0.10	0.022	ug/L		04/11/13 08:12	04/11/13 17:14	1
Fluorene	ND		0.10	0.031	ug/L		04/11/13 08:12	04/11/13 17:14	1
Indeno[1,2,3-cd]pyrene	ND		0.10	0.027	ug/L		04/11/13 08:12	04/11/13 17:14	1
Fluoranthene	ND		0.10	0.030	ug/L		04/11/13 08:12	04/11/13 17:14	1
Naphthalene	ND		0.10	0.030	ug/L		04/11/13 08:12	04/11/13 17:14	1
Phenanthrene	ND		0.10	0.030	ug/L		04/11/13 08:12	04/11/13 17:14	1
Pyrene	ND		0.10	0.035	ug/L		04/11/13 08:12	04/11/13 17:14	1
Dibenz(a,h)anthracene	ND		0.10	0.026	ug/L		04/11/13 08:12	04/11/13 17:14	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	67		29 - 120	04/11/13 08:12	04/11/13 17:14	1
Terphenyl-d14	78		45 - 120	04/11/13 08:12	04/11/13 17:14	1

Lab Sample ID: LCS 720-133853/2-B

Matrix: Water

Analysis Batch: 134167

Client Sample ID: Lab Control Sample

Prep Type: Dissolved

Prep Batch: 134147

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	10.0	6.31		ug/L		63	42 - 120
Acenaphthylene	10.0	6.22		ug/L		62	39 - 120
Anthracene	10.0	8.18		ug/L		82	53 - 120
Benzo[a]anthracene	10.0	7.11		ug/L		71	48 - 120
Benzo[a]pyrene	10.0	6.06		ug/L		61	43 - 120
Chrysene	10.0	6.61		ug/L		66	52 - 120
Benzo[b]fluoranthene	10.0	6.15		ug/L		61	42 - 120
Benzo[k]fluoranthene	10.0	5.75		ug/L		58	42 - 120
Benzo[g,h,i]perylene	10.0	5.26		ug/L		53	24 - 120
Fluorene	10.0	7.20		ug/L		72	45 - 120
Indeno[1,2,3-cd]pyrene	10.0	5.40		ug/L		54	25 - 120
Fluoranthene	10.0	8.58		ug/L		86	57 - 120
Naphthalene	10.0	5.67		ug/L		57	39 - 120
Phenanthrene	10.0	7.47		ug/L		75	46 - 120
Pyrene	10.0	6.78		ug/L		68	47 - 120
Dibenz(a,h)anthracene	10.0	5.27		ug/L		53	21 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl	63		29 - 120
Terphenyl-d14	61		45 - 120

TestAmerica Pleasanton

# QC Sample Results

Client: Weiss Associates  
Project/Site: LRTC Storm Envent Inspection Sampling

TestAmerica Job ID: 720-48852-1

## Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: LCSD 720-133853/3-B

Matrix: Water

Analysis Batch: 134167

Client Sample ID: Lab Control Sample Dup

Prep Type: Dissolved

Prep Batch: 134147

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	10.0	6.01		ug/L		60	42 - 120	5	35
Acenaphthylene	10.0	5.99		ug/L		60	39 - 120	4	35
Anthracene	10.0	8.30		ug/L		83	53 - 120	1	35
Benzo[a]anthracene	10.0	7.40		ug/L		74	48 - 120	4	35
Benzo[a]pyrene	10.0	6.61		ug/L		66	43 - 120	9	35
Chrysene	10.0	7.01		ug/L		70	52 - 120	6	35
Benzo[b]fluoranthene	10.0	6.72		ug/L		67	42 - 120	9	35
Benzo[k]fluoranthene	10.0	6.08		ug/L		61	42 - 120	6	35
Benzo[g,h,i]perylene	10.0	5.77		ug/L		58	24 - 120	9	35
Fluorene	10.0	6.98		ug/L		70	45 - 120	3	35
Indeno[1,2,3-cd]pyrene	10.0	5.95		ug/L		60	25 - 120	10	35
Fluoranthene	10.0	8.50		ug/L		85	57 - 120	1	35
Naphthalene	10.0	5.38		ug/L		54	39 - 120	5	35
Phenanthrene	10.0	7.28		ug/L		73	46 - 120	3	35
Pyrene	10.0	6.73		ug/L		67	47 - 120	1	35
Dibenz(a,h)anthracene	10.0	5.74		ug/L		57	21 - 120	8	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
2-Fluorobiphenyl	59		29 - 120
Terphenyl-d14	66		45 - 120

Lab Sample ID: MB 720-133853/10-B

Matrix: Water

Analysis Batch: 134167

Client Sample ID: Method Blank

Prep Type: Dissolved

Prep Batch: 134149

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.10	0.035	ug/L		04/11/13 08:15	04/11/13 15:17	1
Acenaphthylene	ND		0.10	0.035	ug/L		04/11/13 08:15	04/11/13 15:17	1
Anthracene	ND		0.10	0.029	ug/L		04/11/13 08:15	04/11/13 15:17	1
Benzo[a]anthracene	ND		0.10	0.027	ug/L		04/11/13 08:15	04/11/13 15:17	1
Benzo[a]pyrene	ND		0.10	0.023	ug/L		04/11/13 08:15	04/11/13 15:17	1
Chrysene	ND		0.10	0.031	ug/L		04/11/13 08:15	04/11/13 15:17	1
Benzo[b]fluoranthene	ND		0.10	0.030	ug/L		04/11/13 08:15	04/11/13 15:17	1
Benzo[k]fluoranthene	ND		0.10	0.034	ug/L		04/11/13 08:15	04/11/13 15:17	1
Benzo[g,h,i]perylene	ND		0.10	0.022	ug/L		04/11/13 08:15	04/11/13 15:17	1
Fluorene	ND		0.10	0.031	ug/L		04/11/13 08:15	04/11/13 15:17	1
Indeno[1,2,3-cd]pyrene	ND		0.10	0.027	ug/L		04/11/13 08:15	04/11/13 15:17	1
Fluoranthene	ND		0.10	0.030	ug/L		04/11/13 08:15	04/11/13 15:17	1
Naphthalene	ND		0.10	0.030	ug/L		04/11/13 08:15	04/11/13 15:17	1
Phenanthrene	ND		0.10	0.030	ug/L		04/11/13 08:15	04/11/13 15:17	1
Pyrene	ND		0.10	0.035	ug/L		04/11/13 08:15	04/11/13 15:17	1
Dibenz(a,h)anthracene	ND		0.10	0.026	ug/L		04/11/13 08:15	04/11/13 15:17	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	69		29 - 120	04/11/13 08:15	04/11/13 15:17	1
Terphenyl-d14	81		45 - 120	04/11/13 08:15	04/11/13 15:17	1

TestAmerica Pleasanton

# QC Sample Results

Client: Weiss Associates  
Project/Site: LRTC Storm Envent Inspection Sampling

TestAmerica Job ID: 720-48852-1

## Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: LCS 720-133853/11-B

Matrix: Water

Analysis Batch: 134167

Client Sample ID: Lab Control Sample

Prep Type: Dissolved

Prep Batch: 134149

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	10.0	6.18		ug/L		62	42 - 120
Acenaphthylene	10.0	6.12		ug/L		61	39 - 120
Anthracene	10.0	8.28		ug/L		83	53 - 120
Benzo[a]anthracene	10.0	8.10		ug/L		81	48 - 120
Benzo[a]pyrene	10.0	7.47		ug/L		75	43 - 120
Chrysene	10.0	7.69		ug/L		77	52 - 120
Benzo[b]fluoranthene	10.0	7.56		ug/L		76	42 - 120
Benzo[k]fluoranthene	10.0	6.88		ug/L		69	42 - 120
Benzo[g,h,i]perylene	10.0	7.04		ug/L		70	24 - 120
Fluorene	10.0	6.86		ug/L		69	45 - 120
Indeno[1,2,3-cd]pyrene	10.0	7.05		ug/L		71	25 - 120
Fluoranthene	10.0	8.70		ug/L		87	57 - 120
Naphthalene	10.0	5.47		ug/L		55	39 - 120
Phenanthrene	10.0	7.35		ug/L		74	46 - 120
Pyrene	10.0	6.99		ug/L		70	47 - 120
Dibenz(a,h)anthracene	10.0	7.02		ug/L		70	21 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl	62		29 - 120
Terphenyl-d14	74		45 - 120

Lab Sample ID: LCSD 720-133853/12-B

Matrix: Water

Analysis Batch: 134167

Client Sample ID: Lab Control Sample Dup

Prep Type: Dissolved

Prep Batch: 134149

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	10.0	6.76		ug/L		68	42 - 120	9	35
Acenaphthylene	10.0	6.68		ug/L		67	39 - 120	9	35
Anthracene	10.0	8.91		ug/L		89	53 - 120	7	35
Benzo[a]anthracene	10.0	8.31		ug/L		83	48 - 120	3	35
Benzo[a]pyrene	10.0	7.67		ug/L		77	43 - 120	3	35
Chrysene	10.0	7.98		ug/L		80	52 - 120	4	35
Benzo[b]fluoranthene	10.0	7.71		ug/L		77	42 - 120	2	35
Benzo[k]fluoranthene	10.0	7.22		ug/L		72	42 - 120	5	35
Benzo[g,h,i]perylene	10.0	7.10		ug/L		71	24 - 120	1	35
Fluorene	10.0	7.88		ug/L		79	45 - 120	14	35
Indeno[1,2,3-cd]pyrene	10.0	7.19		ug/L		72	25 - 120	2	35
Fluoranthene	10.0	9.32		ug/L		93	57 - 120	7	35
Naphthalene	10.0	5.66		ug/L		57	39 - 120	4	35
Phenanthrene	10.0	8.07		ug/L		81	46 - 120	9	35
Pyrene	10.0	7.40		ug/L		74	47 - 120	6	35
Dibenz(a,h)anthracene	10.0	7.14		ug/L		71	21 - 120	2	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
2-Fluorobiphenyl	65		29 - 120
Terphenyl-d14	75		45 - 120

TestAmerica Pleasanton

# QC Sample Results

Client: Weiss Associates  
Project/Site: LRTC Storm Envent Inspection Sampling

TestAmerica Job ID: 720-48852-1

## Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 440-97068/1-B

Matrix: Water

Analysis Batch: 97200

Client Sample ID: Method Blank

Prep Type: Dissolved

Prep Batch: 97081

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		1.0	0.90	ug/L		04/09/13 14:22	04/09/13 19:26	1
Barium	ND		1.0	0.30	ug/L		04/09/13 14:22	04/09/13 19:26	1
Beryllium	ND		0.50	0.10	ug/L		04/09/13 14:22	04/09/13 19:26	1
Cadmium	ND		1.0	0.10	ug/L		04/09/13 14:22	04/09/13 19:26	1
Cobalt	ND		1.0	0.10	ug/L		04/09/13 14:22	04/09/13 19:26	1
Chromium	ND		2.0	0.90	ug/L		04/09/13 14:22	04/09/13 19:26	1
Copper	ND		2.0	0.50	ug/L		04/09/13 14:22	04/09/13 19:26	1
Iron	ND		20	8.0	ug/L		04/09/13 14:22	04/09/13 19:26	1
Molybdenum	ND		2.0	0.20	ug/L		04/09/13 14:22	04/09/13 19:26	1
Nickel	ND		2.0	0.50	ug/L		04/09/13 14:22	04/09/13 19:26	1
Lead	ND		1.0	0.20	ug/L		04/09/13 14:22	04/09/13 19:26	1
Antimony	ND		2.0	0.30	ug/L		04/09/13 14:22	04/09/13 19:26	1
Selenium	ND		2.0	0.50	ug/L		04/09/13 14:22	04/09/13 19:26	1
Thallium	ND		1.0	0.20	ug/L		04/09/13 14:22	04/09/13 19:26	1
Vanadium	ND		2.0	0.80	ug/L		04/09/13 14:22	04/09/13 19:26	1
Zinc	ND		20	4.0	ug/L		04/09/13 14:22	04/09/13 19:26	1

Lab Sample ID: MB 440-97068/1-B

Matrix: Water

Analysis Batch: 97209

Client Sample ID: Method Blank

Prep Type: Dissolved

Prep Batch: 97081

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		1.0	0.10	ug/L		04/09/13 14:22	04/09/13 19:56	1
Aluminum	ND		10	8.5	ug/L		04/09/13 14:22	04/09/13 19:56	1

Lab Sample ID: LCS 440-97068/2-B

Matrix: Water

Analysis Batch: 97200

Client Sample ID: Lab Control Sample

Prep Type: Dissolved

Prep Batch: 97081

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	80.0	78.4		ug/L		98	85 - 115
Barium	80.0	77.0		ug/L		96	85 - 115
Beryllium	80.0	76.8		ug/L		96	85 - 115
Cadmium	80.0	79.1		ug/L		99	85 - 115
Cobalt	80.0	78.0		ug/L		97	85 - 115
Chromium	80.0	79.6		ug/L		100	85 - 115
Copper	80.0	78.3		ug/L		98	85 - 115
Iron	800	798		ug/L		100	85 - 115
Molybdenum	80.0	78.0		ug/L		97	85 - 115
Nickel	80.0	78.7		ug/L		98	85 - 115
Lead	80.0	79.8		ug/L		100	85 - 115
Antimony	80.0	79.5		ug/L		99	85 - 115
Selenium	80.0	80.3		ug/L		100	85 - 115
Thallium	80.0	79.3		ug/L		99	85 - 115
Vanadium	80.0	77.4		ug/L		97	85 - 115
Zinc	80.0	79.7		ug/L		100	85 - 115

TestAmerica Pleasanton

# QC Sample Results

Client: Weiss Associates  
Project/Site: LRTC Storm Envent Inspection Sampling

TestAmerica Job ID: 720-48852-1

## Method: 200.8 - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 440-97068/2-B

Matrix: Water

Analysis Batch: 97209

Client Sample ID: Lab Control Sample

Prep Type: Dissolved

Prep Batch: 97081

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	80.0	81.0		ug/L		101	85 - 115
Aluminum	80.0	84.2		ug/L		105	85 - 115

Lab Sample ID: 720-48852-1 MS

Matrix: Water

Analysis Batch: 97200

Client Sample ID: LRTC-SW-02

Prep Type: Dissolved

Prep Batch: 97081

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	ND		80.0	77.0		ug/L		96	70 - 130
Barium	79		80.0	154		ug/L		94	70 - 130
Beryllium	ND		80.0	73.5		ug/L		92	70 - 130
Cadmium	ND		80.0	76.3		ug/L		95	70 - 130
Cobalt	ND		80.0	76.2		ug/L		95	70 - 130
Chromium	2.6		80.0	79.1		ug/L		96	70 - 130
Copper	1.2	J	80.0	77.6		ug/L		96	70 - 130
Iron	11	J	800	783		ug/L		97	70 - 130
Molybdenum	4.5		80.0	82.9		ug/L		98	70 - 130
Nickel	ND		80.0	75.9		ug/L		95	70 - 130
Lead	ND		80.0	78.1		ug/L		98	70 - 130
Antimony	6.9		80.0	85.7		ug/L		98	70 - 130
Selenium	0.56	J	80.0	75.3		ug/L		93	70 - 130
Thallium	0.23	J	80.0	77.7		ug/L		97	70 - 130
Vanadium	61		80.0	137		ug/L		95	70 - 130
Zinc	26		80.0	108		ug/L		103	70 - 130

Lab Sample ID: 720-48852-1 MS

Matrix: Water

Analysis Batch: 97209

Client Sample ID: LRTC-SW-02

Prep Type: Dissolved

Prep Batch: 97081

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	ND		80.0	79.3		ug/L		99	70 - 130
Aluminum	ND		80.0	87.0		ug/L		109	70 - 130

Lab Sample ID: 720-48852-1 MSD

Matrix: Water

Analysis Batch: 97200

Client Sample ID: LRTC-SW-02

Prep Type: Dissolved

Prep Batch: 97081

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Arsenic	ND		80.0	77.3		ug/L		97	70 - 130	0	20
Barium	79		80.0	153		ug/L		93	70 - 130	0	20
Beryllium	ND		80.0	73.5		ug/L		92	70 - 130	0	20
Cadmium	ND		80.0	75.1		ug/L		94	70 - 130	2	20
Cobalt	ND		80.0	77.1		ug/L		96	70 - 130	1	20
Chromium	2.6		80.0	80.5		ug/L		97	70 - 130	2	20
Copper	1.2	J	80.0	78.0		ug/L		96	70 - 130	0	20
Iron	11	J	800	789		ug/L		97	70 - 130	1	20
Molybdenum	4.5		80.0	82.7		ug/L		98	70 - 130	0	20
Nickel	ND		80.0	76.6		ug/L		96	70 - 130	1	20
Lead	ND		80.0	77.3		ug/L		97	70 - 130	1	20

TestAmerica Pleasanton

# QC Sample Results

Client: Weiss Associates  
Project/Site: LRTC Storm Envent Inspection Sampling

TestAmerica Job ID: 720-48852-1

## Method: 200.8 - Metals (ICP/MS) (Continued)

Lab Sample ID: 720-48852-1 MSD

Matrix: Water

Analysis Batch: 97200

Client Sample ID: LRTC-SW-02

Prep Type: Dissolved

Prep Batch: 97081

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	6.9		80.0	85.2		ug/L		98	70 - 130	1	20
Selenium	0.56	J	80.0	76.2		ug/L		95	70 - 130	1	20
Thallium	0.23	J	80.0	76.9		ug/L		96	70 - 130	1	20
Vanadium	61		80.0	138		ug/L		97	70 - 130	1	20
Zinc	26		80.0	106		ug/L		100	70 - 130	2	20

Lab Sample ID: 720-48852-1 MSD

Matrix: Water

Analysis Batch: 97209

Client Sample ID: LRTC-SW-02

Prep Type: Dissolved

Prep Batch: 97081

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Silver	ND		80.0	79.6		ug/L		100	70 - 130	0	20
Aluminum	ND		80.0	85.9		ug/L		107	70 - 130	1	20

## Method: 200.8 - ICPMS Total Metals

Lab Sample ID: MB 440-97062/1-A

Matrix: Water

Analysis Batch: 97170

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 97062

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		1.0	0.10	ug/L		04/09/13 13:18	04/09/13 17:38	1
Aluminum	ND		10	8.5	ug/L		04/09/13 13:18	04/09/13 17:38	1
Arsenic	ND		1.0	0.90	ug/L		04/09/13 13:18	04/09/13 17:38	1
Barium	ND		1.0	0.30	ug/L		04/09/13 13:18	04/09/13 17:38	1
Beryllium	ND		0.50	0.10	ug/L		04/09/13 13:18	04/09/13 17:38	1
Cadmium	ND		1.0	0.10	ug/L		04/09/13 13:18	04/09/13 17:38	1
Cobalt	ND		1.0	0.10	ug/L		04/09/13 13:18	04/09/13 17:38	1
Chromium	ND		2.0	0.90	ug/L		04/09/13 13:18	04/09/13 17:38	1
Copper	ND		2.0	0.50	ug/L		04/09/13 13:18	04/09/13 17:38	1
Molybdenum	ND		2.0	0.20	ug/L		04/09/13 13:18	04/09/13 17:38	1
Nickel	ND		2.0	0.50	ug/L		04/09/13 13:18	04/09/13 17:38	1
Lead	ND		1.0	0.20	ug/L		04/09/13 13:18	04/09/13 17:38	1
Antimony	ND		2.0	0.30	ug/L		04/09/13 13:18	04/09/13 17:38	1
Selenium	ND		2.0	0.50	ug/L		04/09/13 13:18	04/09/13 17:38	1
Thallium	ND		1.0	0.20	ug/L		04/09/13 13:18	04/09/13 17:38	1
Vanadium	ND		2.0	0.80	ug/L		04/09/13 13:18	04/09/13 17:38	1

Lab Sample ID: MB 440-97062/1-A

Matrix: Water

Analysis Batch: 97185

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 97062

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		20	8.0	ug/L		04/09/13 13:18	04/09/13 18:34	1
Zinc	ND		20	4.0	ug/L		04/09/13 13:18	04/09/13 18:34	1

TestAmerica Pleasanton

# QC Sample Results

Client: Weiss Associates  
Project/Site: LRTC Storm Envent Inspection Sampling

TestAmerica Job ID: 720-48852-1

## Method: 200.8 - ICPMS Total Metals (Continued)

Lab Sample ID: LCS 440-97062/2-A

Matrix: Water

Analysis Batch: 97170

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 97062

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	80.0	80.7		ug/L		101	85 - 115
Aluminum	80.0	87.7		ug/L		110	85 - 115
Arsenic	80.0	79.7		ug/L		100	85 - 115
Barium	80.0	80.4		ug/L		101	85 - 115
Beryllium	80.0	86.1		ug/L		108	85 - 115
Cadmium	80.0	80.7		ug/L		101	85 - 115
Cobalt	80.0	80.2		ug/L		100	85 - 115
Chromium	80.0	81.4		ug/L		102	85 - 115
Copper	80.0	79.9		ug/L		100	85 - 115
Molybdenum	80.0	83.7		ug/L		105	85 - 115
Nickel	80.0	75.4		ug/L		94	85 - 115
Lead	80.0	77.8		ug/L		97	85 - 115
Antimony	80.0	80.8		ug/L		101	85 - 115
Selenium	80.0	81.0		ug/L		101	85 - 115
Thallium	80.0	77.7		ug/L		97	85 - 115
Vanadium	80.0	80.8		ug/L		101	85 - 115

Lab Sample ID: LCS 440-97062/2-A

Matrix: Water

Analysis Batch: 97185

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 97062

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	800	804		ug/L		100	85 - 115
Zinc	80.0	81.8		ug/L		102	85 - 115

Lab Sample ID: 720-48852-1 MS

Matrix: Water

Analysis Batch: 97170

Client Sample ID: LRTC-SW-02

Prep Type: Total Recoverable

Prep Batch: 97062

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	ND		80.0	77.1		ug/L		96	70 - 130
Aluminum	300		80.0	365		ug/L		77	70 - 130
Arsenic	1.2		80.0	79.3		ug/L		98	70 - 130
Barium	14		80.0	92.3		ug/L		98	70 - 130
Beryllium	ND		80.0	85.6		ug/L		107	70 - 130
Cadmium	ND		80.0	78.3		ug/L		98	70 - 130
Cobalt	0.36 J		80.0	78.3		ug/L		97	70 - 130
Chromium	4.1		80.0	82.3		ug/L		98	70 - 130
Copper	2.9		80.0	80.5		ug/L		97	70 - 130
Molybdenum	4.6		80.0	85.4		ug/L		101	70 - 130
Nickel	4.1		80.0	75.8		ug/L		90	70 - 130
Lead	2.4		80.0	79.3		ug/L		96	70 - 130
Antimony	7.1		80.0	86.0		ug/L		99	70 - 130
Selenium	1.2 J		80.0	78.0		ug/L		96	70 - 130
Thallium	ND		80.0	76.2		ug/L		95	70 - 130
Vanadium	65		80.0	142		ug/L		96	70 - 130

TestAmerica Pleasanton

# QC Sample Results

Client: Weiss Associates  
Project/Site: LRTC Storm Envent Inspection Sampling

TestAmerica Job ID: 720-48852-1

## Method: 200.8 - ICPMS Total Metals (Continued)

Lab Sample ID: 720-48852-1 MS

Matrix: Water

Analysis Batch: 97185

Client Sample ID: LRTC-SW-02

Prep Type: Total Recoverable

Prep Batch: 97062

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	560		800	1270		ug/L		89	70 - 130
Zinc	33		80.0	117		ug/L		105	70 - 130

Lab Sample ID: 720-48852-1 MSD

Matrix: Water

Analysis Batch: 97170

Client Sample ID: LRTC-SW-02

Prep Type: Total Recoverable

Prep Batch: 97062

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Silver	ND		80.0	77.9		ug/L		97	70 - 130	1	20
Aluminum	300		80.0	379		ug/L		95	70 - 130	4	20
Arsenic	1.2		80.0	79.4		ug/L		98	70 - 130	0	20
Barium	14		80.0	92.2		ug/L		98	70 - 130	0	20
Beryllium	ND		80.0	83.9		ug/L		105	70 - 130	2	20
Cadmium	ND		80.0	78.3		ug/L		98	70 - 130	0	20
Cobalt	0.36	J	80.0	77.5		ug/L		96	70 - 130	1	20
Chromium	4.1		80.0	84.1		ug/L		100	70 - 130	2	20
Copper	2.9		80.0	80.4		ug/L		97	70 - 130	0	20
Molybdenum	4.6		80.0	86.0		ug/L		102	70 - 130	1	20
Nickel	4.1		80.0	76.4		ug/L		90	70 - 130	1	20
Lead	2.4		80.0	79.9		ug/L		97	70 - 130	1	20
Antimony	7.1		80.0	86.9		ug/L		100	70 - 130	1	20
Selenium	1.2	J	80.0	76.9		ug/L		95	70 - 130	1	20
Thallium	ND		80.0	76.6		ug/L		96	70 - 130	1	20
Vanadium	65		80.0	147		ug/L		102	70 - 130	3	20

Lab Sample ID: 720-48852-1 MSD

Matrix: Water

Analysis Batch: 97185

Client Sample ID: LRTC-SW-02

Prep Type: Total Recoverable

Prep Batch: 97062

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Iron	560		800	1380		ug/L		103	70 - 130	8	20
Zinc	33		80.0	115		ug/L		103	70 - 130	1	20

## Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 440-97151/1-A

Matrix: Water

Analysis Batch: 97392

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 97151

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00010	mg/L		04/10/13 10:40	04/10/13 13:26	1

Lab Sample ID: LCS 440-97151/2-A

Matrix: Water

Analysis Batch: 97392

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 97151

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00800	0.00816		mg/L		102	85 - 115

TestAmerica Pleasanton



# QC Sample Results

Client: Weiss Associates  
Project/Site: LRTC Storm Envent Inspection Sampling

TestAmerica Job ID: 720-48852-1

## Method: 245.1 - Mercury (CVAA) (Continued)

Lab Sample ID: 720-48852-1 MS

Matrix: Water

Analysis Batch: 97392

Client Sample ID: LRTC-SW-02

Prep Type: Total/NA

Prep Batch: 97151

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	ND		0.00800	0.00814		mg/L		102	70 - 130

Lab Sample ID: 720-48852-1 MSD

Matrix: Water

Analysis Batch: 97392

Client Sample ID: LRTC-SW-02

Prep Type: Total/NA

Prep Batch: 97151

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	ND		0.00800	0.00831		mg/L		104	70 - 130	2	20

Lab Sample ID: MB 440-97152/1-A

Matrix: Water

Analysis Batch: 97393

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 97152

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00010	mg/L		04/10/13 10:40	04/10/13 13:50	1

Lab Sample ID: LCS 440-97152/2-A

Matrix: Water

Analysis Batch: 97393

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 97152

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00800	0.00815		mg/L		102	85 - 115

Lab Sample ID: 720-48852-1 MS

Matrix: Water

Analysis Batch: 97393

Client Sample ID: LRTC-SW-02

Prep Type: Dissolved

Prep Batch: 97152

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	ND		0.00800	0.00805		mg/L		101	70 - 130

Lab Sample ID: 720-48852-1 MSD

Matrix: Water

Analysis Batch: 97393

Client Sample ID: LRTC-SW-02

Prep Type: Dissolved

Prep Batch: 97152

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	ND		0.00800	0.00835		mg/L		104	70 - 130	4	20

## Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 440-97171/1

Matrix: Water

Analysis Batch: 97171

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		10	10	mg/L			04/09/13 18:20	1

TestAmerica Pleasanton

## QC Sample Results

Client: Weiss Associates  
Project/Site: LRTC Storm Envent Inspection Sampling

TestAmerica Job ID: 720-48852-1

### Method: SM 2540D - Solids, Total Suspended (TSS) (Continued)

Lab Sample ID: LCS 440-97171/2

Matrix: Water

Analysis Batch: 97171

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Suspended Solids	1000	984		mg/L		98	85 - 115

# QC Association Summary

Client: Weiss Associates  
Project/Site: LRTC Storm Envent Inspection Sampling

TestAmerica Job ID: 720-48852-1

## GC/MS Semi VOA

### Prep Batch: 134056

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-48852-1	LRTC-SW-02	Total/NA	Water	3510C	
720-48852-2	LRTC-SW-03	Total/NA	Water	3510C	
720-48852-3	LRTC-SW-04	Total/NA	Water	3510C	
720-48852-4	LRTC-SW-05	Total/NA	Water	3510C	

### Analysis Batch: 134070

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-48852-1	LRTC-SW-02	Total/NA	Water	8270C SIM	134056
720-48852-2	LRTC-SW-03	Total/NA	Water	8270C SIM	134056
720-48852-3	LRTC-SW-04	Total/NA	Water	8270C SIM	134056
720-48852-4	LRTC-SW-05	Total/NA	Water	8270C SIM	134056

### Prep Batch: 134147

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-48852-1	LRTC-SW-02	Dissolved	Water	3510C	
720-48852-4	LRTC-SW-05	Dissolved	Water	3510C	
LCS 720-133853/2-B	Lab Control Sample	Dissolved	Water	3510C	
LCSD 720-133853/3-B	Lab Control Sample Dup	Dissolved	Water	3510C	
MB 720-133853/1-B	Method Blank	Dissolved	Water	3510C	

### Prep Batch: 134149

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-48852-2	LRTC-SW-03	Dissolved	Water	3510C	
720-48852-3	LRTC-SW-04	Dissolved	Water	3510C	
LCS 720-133853/11-B	Lab Control Sample	Dissolved	Water	3510C	
LCSD 720-133853/12-B	Lab Control Sample Dup	Dissolved	Water	3510C	
MB 720-133853/10-B	Method Blank	Dissolved	Water	3510C	

### Analysis Batch: 134167

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-48852-1	LRTC-SW-02	Dissolved	Water	8270C SIM	134147
720-48852-2	LRTC-SW-03	Dissolved	Water	8270C SIM	134149
720-48852-3	LRTC-SW-04	Dissolved	Water	8270C SIM	134149
720-48852-4	LRTC-SW-05	Dissolved	Water	8270C SIM	134147
LCS 720-133853/11-B	Lab Control Sample	Dissolved	Water	8270C SIM	134149
LCS 720-133853/2-B	Lab Control Sample	Dissolved	Water	8270C SIM	134147
LCSD 720-133853/12-B	Lab Control Sample Dup	Dissolved	Water	8270C SIM	134149
LCSD 720-133853/3-B	Lab Control Sample Dup	Dissolved	Water	8270C SIM	134147
MB 720-133853/10-B	Method Blank	Dissolved	Water	8270C SIM	134149
MB 720-133853/1-B	Method Blank	Dissolved	Water	8270C SIM	134147

## Metals

### Prep Batch: 97062

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-48852-1	LRTC-SW-02	Total Recoverable	Water	200.2	
720-48852-1 MS	LRTC-SW-02	Total Recoverable	Water	200.2	
720-48852-1 MSD	LRTC-SW-02	Total Recoverable	Water	200.2	
720-48852-2	LRTC-SW-03	Total Recoverable	Water	200.2	
720-48852-3	LRTC-SW-04	Total Recoverable	Water	200.2	

TestAmerica Pleasanton

# QC Association Summary

Client: Weiss Associates  
Project/Site: LRTC Storm Envent Inspection Sampling

TestAmerica Job ID: 720-48852-1

## Metals (Continued)

### Prep Batch: 97062 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-48852-4	LRTC-SW-05	Total Recoverable	Water	200.2	
LCS 440-97062/2-A	Lab Control Sample	Total Recoverable	Water	200.2	
MB 440-97062/1-A	Method Blank	Total Recoverable	Water	200.2	

### Prep Batch: 97081

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-48852-1	LRTC-SW-02	Dissolved	Water	200.2	
720-48852-1 MS	LRTC-SW-02	Dissolved	Water	200.2	
720-48852-1 MSD	LRTC-SW-02	Dissolved	Water	200.2	
720-48852-2	LRTC-SW-03	Dissolved	Water	200.2	
720-48852-3	LRTC-SW-04	Dissolved	Water	200.2	
720-48852-4	LRTC-SW-05	Dissolved	Water	200.2	
LCS 440-97068/2-B	Lab Control Sample	Dissolved	Water	200.2	
MB 440-97068/1-B	Method Blank	Dissolved	Water	200.2	

### Prep Batch: 97151

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-48852-1	LRTC-SW-02	Total/NA	Water	245.1	
720-48852-1 MS	LRTC-SW-02	Total/NA	Water	245.1	
720-48852-1 MSD	LRTC-SW-02	Total/NA	Water	245.1	
720-48852-2	LRTC-SW-03	Total/NA	Water	245.1	
720-48852-3	LRTC-SW-04	Total/NA	Water	245.1	
720-48852-4	LRTC-SW-05	Total/NA	Water	245.1	
LCS 440-97151/2-A	Lab Control Sample	Total/NA	Water	245.1	
MB 440-97151/1-A	Method Blank	Total/NA	Water	245.1	

### Prep Batch: 97152

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-48852-1	LRTC-SW-02	Dissolved	Water	245.1	
720-48852-1 MS	LRTC-SW-02	Dissolved	Water	245.1	
720-48852-1 MSD	LRTC-SW-02	Dissolved	Water	245.1	
720-48852-2	LRTC-SW-03	Dissolved	Water	245.1	
720-48852-3	LRTC-SW-04	Dissolved	Water	245.1	
720-48852-4	LRTC-SW-05	Dissolved	Water	245.1	
LCS 440-97152/2-A	Lab Control Sample	Total/NA	Water	245.1	
MB 440-97152/1-A	Method Blank	Total/NA	Water	245.1	

### Analysis Batch: 97170

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-48852-1	LRTC-SW-02	Total Recoverable	Water	200.8	97062
720-48852-1 MS	LRTC-SW-02	Total Recoverable	Water	200.8	97062
720-48852-1 MSD	LRTC-SW-02	Total Recoverable	Water	200.8	97062
720-48852-2	LRTC-SW-03	Total Recoverable	Water	200.8	97062
720-48852-3	LRTC-SW-04	Total Recoverable	Water	200.8	97062
720-48852-4	LRTC-SW-05	Total Recoverable	Water	200.8	97062
LCS 440-97062/2-A	Lab Control Sample	Total Recoverable	Water	200.8	97062
MB 440-97062/1-A	Method Blank	Total Recoverable	Water	200.8	97062

### Analysis Batch: 97185

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-48852-1	LRTC-SW-02	Total Recoverable	Water	200.8	97062

TestAmerica Pleasanton

# QC Association Summary

Client: Weiss Associates  
Project/Site: LRTC Storm Envent Inspection Sampling

TestAmerica Job ID: 720-48852-1

## Metals (Continued)

### Analysis Batch: 97185 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-48852-1 MS	LRTC-SW-02	Total Recoverable	Water	200.8	97062
720-48852-1 MSD	LRTC-SW-02	Total Recoverable	Water	200.8	97062
720-48852-2	LRTC-SW-03	Total Recoverable	Water	200.8	97062
720-48852-3	LRTC-SW-04	Total Recoverable	Water	200.8	97062
720-48852-4	LRTC-SW-05	Total Recoverable	Water	200.8	97062
LCS 440-97062/2-A	Lab Control Sample	Total Recoverable	Water	200.8	97062
MB 440-97062/1-A	Method Blank	Total Recoverable	Water	200.8	97062

### Analysis Batch: 97200

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-48852-1	LRTC-SW-02	Dissolved	Water	200.8	97081
720-48852-1 MS	LRTC-SW-02	Dissolved	Water	200.8	97081
720-48852-1 MSD	LRTC-SW-02	Dissolved	Water	200.8	97081
720-48852-2	LRTC-SW-03	Dissolved	Water	200.8	97081
720-48852-3	LRTC-SW-04	Dissolved	Water	200.8	97081
720-48852-4	LRTC-SW-05	Dissolved	Water	200.8	97081
LCS 440-97068/2-B	Lab Control Sample	Dissolved	Water	200.8	97081
MB 440-97068/1-B	Method Blank	Dissolved	Water	200.8	97081

### Analysis Batch: 97209

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-48852-1	LRTC-SW-02	Dissolved	Water	200.8	97081
720-48852-1 MS	LRTC-SW-02	Dissolved	Water	200.8	97081
720-48852-1 MSD	LRTC-SW-02	Dissolved	Water	200.8	97081
720-48852-2	LRTC-SW-03	Dissolved	Water	200.8	97081
720-48852-3	LRTC-SW-04	Dissolved	Water	200.8	97081
720-48852-4	LRTC-SW-05	Dissolved	Water	200.8	97081
LCS 440-97068/2-B	Lab Control Sample	Dissolved	Water	200.8	97081
MB 440-97068/1-B	Method Blank	Dissolved	Water	200.8	97081

### Analysis Batch: 97392

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-48852-1	LRTC-SW-02	Total/NA	Water	245.1	97151
720-48852-1 MS	LRTC-SW-02	Total/NA	Water	245.1	97151
720-48852-1 MSD	LRTC-SW-02	Total/NA	Water	245.1	97151
720-48852-2	LRTC-SW-03	Total/NA	Water	245.1	97151
720-48852-3	LRTC-SW-04	Total/NA	Water	245.1	97151
720-48852-4	LRTC-SW-05	Total/NA	Water	245.1	97151
LCS 440-97151/2-A	Lab Control Sample	Total/NA	Water	245.1	97151
MB 440-97151/1-A	Method Blank	Total/NA	Water	245.1	97151

### Analysis Batch: 97393

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-48852-1	LRTC-SW-02	Dissolved	Water	245.1	97152
720-48852-1 MS	LRTC-SW-02	Dissolved	Water	245.1	97152
720-48852-1 MSD	LRTC-SW-02	Dissolved	Water	245.1	97152
720-48852-2	LRTC-SW-03	Dissolved	Water	245.1	97152
720-48852-3	LRTC-SW-04	Dissolved	Water	245.1	97152
720-48852-4	LRTC-SW-05	Dissolved	Water	245.1	97152
LCS 440-97152/2-A	Lab Control Sample	Total/NA	Water	245.1	97152
MB 440-97152/1-A	Method Blank	Total/NA	Water	245.1	97152

TestAmerica Pleasanton

## QC Association Summary

Client: Weiss Associates  
Project/Site: LRTC Storm Envent Inspection Sampling

TestAmerica Job ID: 720-48852-1

### General Chemistry

#### Analysis Batch: 97171

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-48852-1	LRTC-SW-02	Total/NA	Water	SM 2540D	
720-48852-2	LRTC-SW-03	Total/NA	Water	SM 2540D	
720-48852-3	LRTC-SW-04	Total/NA	Water	SM 2540D	
720-48852-4	LRTC-SW-05	Total/NA	Water	SM 2540D	
LCS 440-97171/2	Lab Control Sample	Total/NA	Water	SM 2540D	
MB 440-97171/1	Method Blank	Total/NA	Water	SM 2540D	

# Lab Chronicle

Client: Weiss Associates  
Project/Site: LRTC Storm Envent Inspection Sampling

TestAmerica Job ID: 720-48852-1

**Client Sample ID: LRTC-SW-02**

**Date Collected: 04/04/13 07:55**

**Date Received: 04/04/13 17:00**

**Lab Sample ID: 720-48852-1**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			134056	04/10/13 08:47	AM	TAL PLS
Total/NA	Analysis	8270C SIM		1	134070	04/10/13 21:45	ML	TAL PLS
Dissolved	Prep	3510C			134147	04/11/13 08:12	AM	TAL PLS
Dissolved	Analysis	8270C SIM		1	134167	04/11/13 17:37	ML	TAL PLS
Total Recoverable	Prep	200.2			97062	04/09/13 13:18	ND	TAL IRV
Total Recoverable	Analysis	200.8		1	97170	04/09/13 17:42	YS	TAL IRV
Total Recoverable	Prep	200.2			97062	04/09/13 13:18	ND	TAL IRV
Total Recoverable	Analysis	200.8		1	97185	04/09/13 18:39	YS	TAL IRV
Dissolved	Prep	200.2			97081	04/09/13 14:22	ND	TAL IRV
Dissolved	Analysis	200.8		1	97200	04/09/13 19:31	YS	TAL IRV
Dissolved	Prep	200.2			97081	04/09/13 14:22	ND	TAL IRV
Dissolved	Analysis	200.8		1	97209	04/09/13 20:01	YS	TAL IRV
Total/NA	Prep	245.1			97151	04/10/13 10:40	MM	TAL IRV
Total/NA	Analysis	245.1		1	97392	04/10/13 13:32	DB	TAL IRV
Dissolved	Prep	245.1			97152	04/10/13 10:40	MM	TAL IRV
Dissolved	Analysis	245.1		1	97393	04/10/13 13:55	DB	TAL IRV
Total/NA	Analysis	SM 2540D		1	97171	04/09/13 18:34	DK	TAL IRV

**Client Sample ID: LRTC-SW-03**

**Date Collected: 04/04/13 08:35**

**Date Received: 04/04/13 17:00**

**Lab Sample ID: 720-48852-2**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			134056	04/10/13 08:47	AM	TAL PLS
Total/NA	Analysis	8270C SIM		1	134070	04/10/13 22:08	ML	TAL PLS
Dissolved	Prep	3510C			134149	04/11/13 08:15	AM	TAL PLS
Dissolved	Analysis	8270C SIM		1	134167	04/11/13 15:41	ML	TAL PLS
Total Recoverable	Prep	200.2			97062	04/09/13 13:18	ND	TAL IRV
Total Recoverable	Analysis	200.8		1	97170	04/09/13 17:49	YS	TAL IRV
Total Recoverable	Prep	200.2			97062	04/09/13 13:18	ND	TAL IRV
Total Recoverable	Analysis	200.8		1	97185	04/09/13 18:47	YS	TAL IRV
Dissolved	Prep	200.2			97081	04/09/13 14:22	ND	TAL IRV
Dissolved	Analysis	200.8		1	97200	04/09/13 19:39	YS	TAL IRV
Dissolved	Prep	200.2			97081	04/09/13 14:22	ND	TAL IRV
Dissolved	Analysis	200.8		1	97209	04/09/13 20:07	YS	TAL IRV
Total/NA	Prep	245.1			97151	04/10/13 10:40	MM	TAL IRV
Total/NA	Analysis	245.1		1	97392	04/10/13 13:39	DB	TAL IRV
Dissolved	Prep	245.1			97152	04/10/13 10:40	MM	TAL IRV
Dissolved	Analysis	245.1		1	97393	04/10/13 14:02	DB	TAL IRV
Total/NA	Analysis	SM 2540D		1	97171	04/09/13 18:36	DK	TAL IRV

TestAmerica Pleasanton

# Lab Chronicle

Client: Weiss Associates  
Project/Site: LRTC Storm Envent Inspection Sampling

TestAmerica Job ID: 720-48852-1

**Client Sample ID: LRTC-SW-04**

**Lab Sample ID: 720-48852-3**

**Date Collected: 04/04/13 09:05**

**Matrix: Water**

**Date Received: 04/04/13 17:00**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			134056	04/10/13 08:47	AM	TAL PLS
Total/NA	Analysis	8270C SIM		1	134070	04/10/13 22:31	ML	TAL PLS
Dissolved	Prep	3510C			134149	04/11/13 08:15	AM	TAL PLS
Dissolved	Analysis	8270C SIM		1	134167	04/11/13 16:04	ML	TAL PLS
Total Recoverable	Prep	200.2			97062	04/09/13 13:18	ND	TAL IRV
Total Recoverable	Analysis	200.8		1	97170	04/09/13 17:51	YS	TAL IRV
Total Recoverable	Prep	200.2			97062	04/09/13 13:18	ND	TAL IRV
Total Recoverable	Analysis	200.8		1	97185	04/09/13 18:49	YS	TAL IRV
Dissolved	Prep	200.2			97081	04/09/13 14:22	ND	TAL IRV
Dissolved	Analysis	200.8		1	97200	04/09/13 19:42	YS	TAL IRV
Dissolved	Prep	200.2			97081	04/09/13 14:22	ND	TAL IRV
Dissolved	Analysis	200.8		1	97209	04/09/13 20:09	YS	TAL IRV
Total/NA	Prep	245.1			97151	04/10/13 10:40	MM	TAL IRV
Total/NA	Analysis	245.1		1	97392	04/10/13 13:42	DB	TAL IRV
Dissolved	Prep	245.1			97152	04/10/13 10:40	MM	TAL IRV
Dissolved	Analysis	245.1		1	97393	04/10/13 14:04	DB	TAL IRV
Total/NA	Analysis	SM 2540D		1	97171	04/09/13 18:37	DK	TAL IRV

**Client Sample ID: LRTC-SW-05**

**Lab Sample ID: 720-48852-4**

**Date Collected: 04/04/13 09:20**

**Matrix: Water**

**Date Received: 04/04/13 17:00**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			134056	04/10/13 08:47	AM	TAL PLS
Total/NA	Analysis	8270C SIM		1	134070	04/10/13 21:22	ML	TAL PLS
Dissolved	Prep	3510C			134147	04/11/13 08:12	AM	TAL PLS
Dissolved	Analysis	8270C SIM		1	134167	04/11/13 18:00	ML	TAL PLS
Total Recoverable	Prep	200.2			97062	04/09/13 13:18	ND	TAL IRV
Total Recoverable	Analysis	200.8		1	97170	04/09/13 17:53	YS	TAL IRV
Total Recoverable	Prep	200.2			97062	04/09/13 13:18	ND	TAL IRV
Total Recoverable	Analysis	200.8		1	97185	04/09/13 18:52	YS	TAL IRV
Dissolved	Prep	200.2			97081	04/09/13 14:22	ND	TAL IRV
Dissolved	Analysis	200.8		1	97200	04/09/13 19:44	YS	TAL IRV
Dissolved	Prep	200.2			97081	04/09/13 14:22	ND	TAL IRV
Dissolved	Analysis	200.8		1	97209	04/09/13 20:12	YS	TAL IRV
Total/NA	Prep	245.1			97151	04/10/13 10:40	MM	TAL IRV
Total/NA	Analysis	245.1		1	97392	04/10/13 13:44	DB	TAL IRV
Dissolved	Prep	245.1			97152	04/10/13 10:40	MM	TAL IRV
Dissolved	Analysis	245.1		1	97393	04/10/13 14:07	DB	TAL IRV
Total/NA	Analysis	SM 2540D		1	97171	04/09/13 18:40	DK	TAL IRV

## Laboratory References:

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

TestAmerica Pleasanton



## Certification Summary

Client: Weiss Associates  
Project/Site: LRTC Storm Envent Inspection Sampling

TestAmerica Job ID: 720-48852-1

### Laboratory: TestAmerica Pleasanton

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	State Program	9	2496	01-31-14

### Laboratory: TestAmerica Irvine

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska	State Program	10	CA01531	06-30-13
Arizona	State Program	9	AZ0671	10-13-13
California	LA Cty Sanitation Districts	9	10256	01-31-14
California	NELAP	9	1108CA	01-31-14
California	State Program	9	2706	06-30-14
Guam	State Program	9	Cert. No. 12.002r	03-28-13 *
Hawaii	State Program	9	N/A	01-31-14
Nevada	State Program	9	CA015312007A	07-31-13
Northern Mariana Islands	State Program	9	MP0002	01-31-14
Oregon	NELAP	10	4005	09-12-13
USDA	Federal		P330-09-00080	06-06-14
USEPA UCMR	Federal	1	CA01531	01-31-15

\* Expired certification is currently pending renewal and is considered valid.

TestAmerica Pleasanton

## Method Summary

Client: Weiss Associates  
Project/Site: LRTC Storm Envent Inspection Sampling

TestAmerica Job ID: 720-48852-1

Method	Method Description	Protocol	Laboratory
8270C SIM	PAHs by GCMS (SIM)	SW846	TAL PLS
8270C SIM	Semivolatile Organic Compounds (GC/MS SIM)	SW846	TAL PLS
200.8	ICPMS Total Metals	EPA	TAL IRV
200.8	Metals (ICP/MS)	EPA	TAL IRV
245.1	Mercury (CVAA)	EPA	TAL IRV
SM 2540D	Solids, Total Suspended (TSS)	SM	TAL IRV

### Protocol References:

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater",

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

### Laboratory References:

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

## Sample Summary

Client: Weiss Associates

TestAmerica Job ID: 720-48852-1

Project/Site: LRTC Storm Envent Inspection Sampling

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
720-48852-1	LRTC-SW-02	Water	04/04/13 07:55	04/04/13 17:00
720-48852-2	LRTC-SW-03	Water	04/04/13 08:35	04/04/13 17:00
720-48852-3	LRTC-SW-04	Water	04/04/13 09:05	04/04/13 17:00
720-48852-4	LRTC-SW-05	Water	04/04/13 09:20	04/04/13 17:00

720-46652



881571

## Chain of Custody Record

**TestAmerica**  
**1220 Quarry Lane**  
**Pleasanton, CA 94566**  
**Phone: 925-484-1919 ext.137**

Please send analytic results, electronic deliverables and the original chain-of-custody form to:

INSTRUCTIONS FOR LAB PERSONNEL: ☐ Yes  
GeoTracker EDF required? ☐ Yes

Equis 4-file EDWEDD required? ☒ Yes ☐ No

Specify analytic/prep method and detection limit in rep

**Call immediately with any questions or problems.**

**Weiss Associates**



4/12/2013

[illegible]

Smith, Micah

**720-48852**

**From:** Greg Hulburd [gch@weiss.com]  
**Sent:** Monday, April 08, 2013 3:31 PM  
**To:** Smith, Micah  
**Subject:** LRTC samples from 4/4/2013

Micah-

Just following up on our conversation from last Friday. Is the holding time for the particle size test going to be an issue?

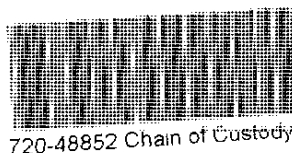
Regarding the instruction on the COC:

- 1- Please proceed with samples LRTC-SW-03 and LRTC-SW-04 (they were marked "Hold" on the COC).  
2- Please continue to hold sample LRTC-SW-05A.

Thank you,

Greg

Greg Hulburd  
Weiss Associates  
2200 Powell Street, Suite 925  
Emeryville, California 94608  
tel: 510.450.6159  
[gch@weiss.com](mailto:gch@weiss.com)



## Login Sample Receipt Checklist

Client: Weiss Associates

Job Number: 720-48852-1

**Login Number: 48852**

**List Source: TestAmerica Pleasanton**

**List Number: 1**

**Creator: Bullock, Tracy**

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	False	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

## Login Sample Receipt Checklist

Client: Weiss Associates

Job Number: 720-48852-1

**Login Number: 48852**

**List Source: TestAmerica Irvine**

**List Number: 1**

**List Creation: 04/09/13 12:40 PM**

**Creator: Soderblom, Tim**

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	N/A	
Samples do not require splitting or compositing.	N/A	
Residual Chlorine Checked.	N/A	

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Pleasanton

1220 Quarry Lane

Pleasanton, CA 94566

Tel: (925)484-1919

TestAmerica Job ID: 720-48852-2

Client Project/Site: LRTC Storm Event Inspection Sampling

For:

Weiss Associates

2200 Powell Street

Suite 925

Emeryville, California 94608

Attn: Greg Hulburd



Authorized for release by:

4/12/2013 5:39:58 PM

Micah Smith

Project Manager I

[micah.smith@testamericainc.com](mailto:micah.smith@testamericainc.com)

### LINKS

Review your project  
results through

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Have a Question?



Visit us at:

[www.testamericainc.com](http://www.testamericainc.com)

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*



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## Definitions/Glossary

Client: Weiss Associates  
Project/Site: LRTC Storm Envent Inspection Sampling

TestAmerica Job ID: 720-48852-2

### Qualifiers

#### GC/MS Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

#### Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.

### Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

## Case Narrative

Client: Weiss Associates  
Project/Site: LRTC Storm Envent Inspection Sampling

TestAmerica Job ID: 720-48852-2

**Job ID: 720-48852-2**

**Laboratory: TestAmerica Pleasanton**

### Narrative

#### Job Narrative 720-48852-2

#### Comments

This report has the field filtered portion of the data. The lab filtered data is reported in job 720-48852-1.

#### Receipt

The samples were received on 4/4/2013 5:00 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 3 coolers at receipt time were 2.4° C, 5.4° C and 5.8° C.

Except:

Insufficient sample volume was provided for the following sample for the MS/MSD for all analyses except Metals 200.8/245.1: LRTC-SW-02.

#### GC/MS Semi VOA

No analytical or quality issues were noted.

#### Metals

No analytical or quality issues were noted.

#### General Chemistry

No analytical or quality issues were noted.

#### Organic Prep

No analytical or quality issues were noted.

# Detection Summary

Client: Weiss Associates  
Project/Site: LRTC Storm Envent Inspection Sampling

TestAmerica Job ID: 720-48852-2

Client Sample ID: LRTC-SW-02

Lab Sample ID: 720-48852-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Aluminum	25		10	8.5	ug/L	1			200.8	Dissolved
Arsenic	0.93	J	1.0	0.90	ug/L	1			200.8	Dissolved
Barium	9.8		1.0	0.30	ug/L	1			200.8	Dissolved
Cobalt	0.12	J	1.0	0.10	ug/L	1			200.8	Dissolved
Chromium	2.9		2.0	0.90	ug/L	1			200.8	Dissolved
Copper	1.9	J	2.0	0.50	ug/L	1			200.8	Dissolved
Iron	29	B	20	8.0	ug/L	1			200.8	Dissolved
Molybdenum	5.0		2.0	0.20	ug/L	1			200.8	Dissolved
Nickel	1.1	J	2.0	0.50	ug/L	1			200.8	Dissolved
Lead	0.21	J	1.0	0.20	ug/L	1			200.8	Dissolved
Antimony	7.6		2.0	0.30	ug/L	1			200.8	Dissolved
Selenium	0.78	J	2.0	0.50	ug/L	1			200.8	Dissolved
Vanadium	66		2.0	0.80	ug/L	1			200.8	Dissolved
Zinc	5.7	J	20	4.0	ug/L	1			200.8	Dissolved

Client Sample ID: LRTC-SW-03

Lab Sample ID: 720-48852-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Benzo[b]fluoranthene	0.056	J	0.10	0.031	ug/L	1			8270C SIM	Dissolved
Aluminum	24		10	8.5	ug/L	1			200.8	Dissolved
Arsenic	1.0		1.0	0.90	ug/L	1			200.8	Dissolved
Barium	10		1.0	0.30	ug/L	1			200.8	Dissolved
Cobalt	0.13	J	1.0	0.10	ug/L	1			200.8	Dissolved
Chromium	2.9		2.0	0.90	ug/L	1			200.8	Dissolved
Copper	1.6	J	2.0	0.50	ug/L	1			200.8	Dissolved
Iron	34	B	20	8.0	ug/L	1			200.8	Dissolved
Molybdenum	5.2		2.0	0.20	ug/L	1			200.8	Dissolved
Nickel	1.0	J	2.0	0.50	ug/L	1			200.8	Dissolved
Lead	0.22	J	1.0	0.20	ug/L	1			200.8	Dissolved
Antimony	8.2		2.0	0.30	ug/L	1			200.8	Dissolved
Selenium	1.5	J	2.0	0.50	ug/L	1			200.8	Dissolved
Vanadium	77		2.0	0.80	ug/L	1			200.8	Dissolved
Zinc	8.6	J	20	4.0	ug/L	1			200.8	Dissolved

Client Sample ID: LRTC-SW-04

Lab Sample ID: 720-48852-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Benzo[a]anthracene	0.12		0.11	0.028	ug/L	1			8270C SIM	Dissolved
Benzo[a]pyrene	0.085	J	0.11	0.024	ug/L	1			8270C SIM	Dissolved
Benzo[b]fluoranthene	0.11		0.11	0.032	ug/L	1			8270C SIM	Dissolved
Benzo[g,h,i]perylene	0.081	J	0.11	0.023	ug/L	1			8270C SIM	Dissolved
Chrysene	0.14		0.11	0.033	ug/L	1			8270C SIM	Dissolved
Dibenz(a,h)anthracene	0.039	J	0.11	0.027	ug/L	1			8270C SIM	Dissolved
Fluoranthene	0.086	J	0.11	0.032	ug/L	1			8270C SIM	Dissolved
Indeno[1,2,3-cd]pyrene	0.030	J	0.11	0.028	ug/L	1			8270C SIM	Dissolved
Phenanthrene	0.073	J	0.11	0.032	ug/L	1			8270C SIM	Dissolved
Pyrene	0.11		0.11	0.037	ug/L	1			8270C SIM	Dissolved
Barium	120		1.0	0.30	ug/L	1			200.8	Dissolved
Cadmium	0.14	J	1.0	0.10	ug/L	1			200.8	Dissolved
Cobalt	0.19	J	1.0	0.10	ug/L	1			200.8	Dissolved

This Detection Summary does not include radiochemical test results.

TestAmerica Pleasanton

# Detection Summary

Client: Weiss Associates  
Project/Site: LRTC Storm Envent Inspection Sampling

TestAmerica Job ID: 720-48852-2

## Client Sample ID: LRTC-SW-04 (Continued)

Lab Sample ID: 720-48852-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Chromium	2.1		2.0	0.90	ug/L	1			200.8	Dissolved
Copper	5.2		2.0	0.50	ug/L	1			200.8	Dissolved
Iron	20	B	20	8.0	ug/L	1			200.8	Dissolved
Molybdenum	4.1		2.0	0.20	ug/L	1			200.8	Dissolved
Nickel	0.89	J	2.0	0.50	ug/L	1			200.8	Dissolved
Lead	0.34	J	1.0	0.20	ug/L	1			200.8	Dissolved
Antimony	1.6	J	2.0	0.30	ug/L	1			200.8	Dissolved
Selenium	0.51	J	2.0	0.50	ug/L	1			200.8	Dissolved
Vanadium	2.2		2.0	0.80	ug/L	1			200.8	Dissolved
Zinc	110		20	4.0	ug/L	1			200.8	Dissolved

## Client Sample ID: LRTC-SW-05

Lab Sample ID: 720-48852-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Benzo[a]anthracene	0.12		0.10	0.028	ug/L	1			8270C SIM	Dissolved
Benzo[a]pyrene	0.098	J	0.10	0.023	ug/L	1			8270C SIM	Dissolved
Benzo[b]fluoranthene	0.11		0.10	0.031	ug/L	1			8270C SIM	Dissolved
Benzo[g,h,i]perylene	0.091	J	0.10	0.022	ug/L	1			8270C SIM	Dissolved
Chrysene	0.15		0.10	0.032	ug/L	1			8270C SIM	Dissolved
Dibenz(a,h)anthracene	0.039	J	0.10	0.027	ug/L	1			8270C SIM	Dissolved
Fluoranthene	0.11		0.10	0.031	ug/L	1			8270C SIM	Dissolved
Indeno[1,2,3-cd]pyrene	0.033	J	0.10	0.028	ug/L	1			8270C SIM	Dissolved
Phenanthrene	0.070	J	0.10	0.031	ug/L	1			8270C SIM	Dissolved
Pyrene	0.11		0.10	0.036	ug/L	1			8270C SIM	Dissolved
Aluminum	330		10	8.5	ug/L	1			200.8	Dissolved
Arsenic	1.2		1.0	0.90	ug/L	1			200.8	Dissolved
Barium	20		1.0	0.30	ug/L	1			200.8	Dissolved
Cadmium	0.33	J	1.0	0.10	ug/L	1			200.8	Dissolved
Cobalt	0.82	J	1.0	0.10	ug/L	1			200.8	Dissolved
Chromium	4.3		2.0	0.90	ug/L	1			200.8	Dissolved
Copper	10		2.0	0.50	ug/L	1			200.8	Dissolved
Iron	1400	B	20	8.0	ug/L	1			200.8	Dissolved
Molybdenum	5.0		2.0	0.20	ug/L	1			200.8	Dissolved
Nickel	3.2		2.0	0.50	ug/L	1			200.8	Dissolved
Lead	16		1.0	0.20	ug/L	1			200.8	Dissolved
Antimony	2.0		2.0	0.30	ug/L	1			200.8	Dissolved
Selenium	0.73	J	2.0	0.50	ug/L	1			200.8	Dissolved
Vanadium	4.7		2.0	0.80	ug/L	1			200.8	Dissolved
Zinc	91		20	4.0	ug/L	1			200.8	Dissolved

This Detection Summary does not include radiochemical test results.

TestAmerica Pleasanton

# Client Sample Results

Client: Weiss Associates  
Project/Site: LRTC Storm Envent Inspection Sampling

TestAmerica Job ID: 720-48852-2

**Client Sample ID: LRTC-SW-02**

**Lab Sample ID: 720-48852-1**

**Date Collected: 04/04/13 07:55**

**Matrix: Water**

**Date Received: 04/04/13 17:00**

## Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.11	0.037	ug/L		04/10/13 08:47	04/10/13 20:12	1
Acenaphthylene	ND		0.11	0.037	ug/L		04/10/13 08:47	04/10/13 20:12	1
Anthracene	ND		0.11	0.031	ug/L		04/10/13 08:47	04/10/13 20:12	1
Benzo[a]anthracene	ND		0.11	0.029	ug/L		04/10/13 08:47	04/10/13 20:12	1
Benzo[a]pyrene	ND		0.11	0.024	ug/L		04/10/13 08:47	04/10/13 20:12	1
Benzo[b]fluoranthene	ND		0.11	0.032	ug/L		04/10/13 08:47	04/10/13 20:12	1
Benzo[g,h,i]perylene	ND		0.11	0.023	ug/L		04/10/13 08:47	04/10/13 20:12	1
Benzo[k]fluoranthene	ND		0.11	0.036	ug/L		04/10/13 08:47	04/10/13 20:12	1
Chrysene	ND		0.11	0.033	ug/L		04/10/13 08:47	04/10/13 20:12	1
Dibenz(a,h)anthracene	ND		0.11	0.028	ug/L		04/10/13 08:47	04/10/13 20:12	1
Fluoranthene	ND		0.11	0.032	ug/L		04/10/13 08:47	04/10/13 20:12	1
Fluorene	ND		0.11	0.033	ug/L		04/10/13 08:47	04/10/13 20:12	1
Indeno[1,2,3-cd]pyrene	ND		0.11	0.029	ug/L		04/10/13 08:47	04/10/13 20:12	1
Naphthalene	ND		0.11	0.032	ug/L		04/10/13 08:47	04/10/13 20:12	1
Phenanthrene	ND		0.11	0.032	ug/L		04/10/13 08:47	04/10/13 20:12	1
Pyrene	ND		0.11	0.037	ug/L		04/10/13 08:47	04/10/13 20:12	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	67		29 - 120				04/10/13 08:47	04/10/13 20:12	1
Terphenyl-d14	88		45 - 120				04/10/13 08:47	04/10/13 20:12	1

## Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		1.0	0.10	ug/L		04/10/13 08:12	04/10/13 13:47	1
Aluminum	25		10	8.5	ug/L		04/10/13 08:12	04/10/13 13:47	1
Arsenic	0.93	J	1.0	0.90	ug/L		04/10/13 08:12	04/10/13 13:47	1
Barium	9.8		1.0	0.30	ug/L		04/10/13 08:12	04/10/13 13:47	1
Beryllium	ND		0.50	0.10	ug/L		04/10/13 08:12	04/10/13 13:47	1
Cadmium	ND		1.0	0.10	ug/L		04/10/13 08:12	04/10/13 13:47	1
Cobalt	0.12	J	1.0	0.10	ug/L		04/10/13 08:12	04/10/13 13:47	1
Chromium	2.9		2.0	0.90	ug/L		04/10/13 08:12	04/10/13 13:47	1
Copper	1.9	J	2.0	0.50	ug/L		04/10/13 08:12	04/10/13 13:47	1
Iron	29	B	20	8.0	ug/L		04/10/13 08:12	04/10/13 13:47	1
Molybdenum	5.0		2.0	0.20	ug/L		04/10/13 08:12	04/10/13 13:47	1
Nickel	1.1	J	2.0	0.50	ug/L		04/10/13 08:12	04/10/13 13:47	1
Lead	0.21	J	1.0	0.20	ug/L		04/10/13 08:12	04/10/13 13:47	1
Antimony	7.6		2.0	0.30	ug/L		04/10/13 08:12	04/10/13 13:47	1
Selenium	0.78	J	2.0	0.50	ug/L		04/10/13 08:12	04/10/13 13:47	1
Thallium	ND		1.0	0.20	ug/L		04/10/13 08:12	04/10/13 13:47	1
Vanadium	66		2.0	0.80	ug/L		04/10/13 08:12	04/10/13 13:47	1
Zinc	5.7	J	20	4.0	ug/L		04/10/13 08:12	04/10/13 13:47	1

## Method: 245.1 - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00010	mg/L		04/10/13 11:04	04/10/13 13:30	1

TestAmerica Pleasanton

# Client Sample Results

Client: Weiss Associates  
Project/Site: LRTC Storm Envent Inspection Sampling

TestAmerica Job ID: 720-48852-2

**Client Sample ID: LRTC-SW-03**

**Lab Sample ID: 720-48852-2**

**Date Collected: 04/04/13 08:35**

**Matrix: Water**

**Date Received: 04/04/13 17:00**

## Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.10	0.036	ug/L		04/10/13 08:47	04/10/13 20:36	1
Acenaphthylene	ND		0.10	0.036	ug/L		04/10/13 08:47	04/10/13 20:36	1
Anthracene	ND		0.10	0.030	ug/L		04/10/13 08:47	04/10/13 20:36	1
Benzo[a]anthracene	ND		0.10	0.028	ug/L		04/10/13 08:47	04/10/13 20:36	1
Benzo[a]pyrene	ND		0.10	0.024	ug/L		04/10/13 08:47	04/10/13 20:36	1
<b>Benzo[b]fluoranthene</b>	<b>0.056</b>	<b>J</b>	0.10	0.031	ug/L		04/10/13 08:47	04/10/13 20:36	1
Benzo[g,h,i]perylene	ND		0.10	0.023	ug/L		04/10/13 08:47	04/10/13 20:36	1
Benzo[k]fluoranthene	ND		0.10	0.035	ug/L		04/10/13 08:47	04/10/13 20:36	1
Chrysene	ND		0.10	0.032	ug/L		04/10/13 08:47	04/10/13 20:36	1
Dibenz(a,h)anthracene	ND		0.10	0.027	ug/L		04/10/13 08:47	04/10/13 20:36	1
Fluoranthene	ND		0.10	0.031	ug/L		04/10/13 08:47	04/10/13 20:36	1
Fluorene	ND		0.10	0.032	ug/L		04/10/13 08:47	04/10/13 20:36	1
Indeno[1,2,3-cd]pyrene	ND		0.10	0.028	ug/L		04/10/13 08:47	04/10/13 20:36	1
Naphthalene	ND		0.10	0.031	ug/L		04/10/13 08:47	04/10/13 20:36	1
Phenanthrene	ND		0.10	0.031	ug/L		04/10/13 08:47	04/10/13 20:36	1
Pyrene	ND		0.10	0.036	ug/L		04/10/13 08:47	04/10/13 20:36	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	58		29 - 120				04/10/13 08:47	04/10/13 20:36	1
Terphenyl-d14	85		45 - 120				04/10/13 08:47	04/10/13 20:36	1

## Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		1.0	0.10	ug/L		04/10/13 08:12	04/10/13 13:54	1
<b>Aluminum</b>	<b>24</b>		10	8.5	ug/L		04/10/13 08:12	04/10/13 13:54	1
<b>Arsenic</b>	<b>1.0</b>		1.0	0.90	ug/L		04/10/13 08:12	04/10/13 13:54	1
<b>Barium</b>	<b>10</b>		1.0	0.30	ug/L		04/10/13 08:12	04/10/13 13:54	1
Beryllium	ND		0.50	0.10	ug/L		04/10/13 08:12	04/10/13 13:54	1
Cadmium	ND		1.0	0.10	ug/L		04/10/13 08:12	04/10/13 13:54	1
<b>Cobalt</b>	<b>0.13</b>	<b>J</b>	1.0	0.10	ug/L		04/10/13 08:12	04/10/13 13:54	1
<b>Chromium</b>	<b>2.9</b>		2.0	0.90	ug/L		04/10/13 08:12	04/10/13 13:54	1
<b>Copper</b>	<b>1.6</b>	<b>J</b>	2.0	0.50	ug/L		04/10/13 08:12	04/10/13 13:54	1
<b>Iron</b>	<b>34</b>	<b>B</b>	20	8.0	ug/L		04/10/13 08:12	04/10/13 13:54	1
<b>Molybdenum</b>	<b>5.2</b>		2.0	0.20	ug/L		04/10/13 08:12	04/10/13 13:54	1
<b>Nickel</b>	<b>1.0</b>	<b>J</b>	2.0	0.50	ug/L		04/10/13 08:12	04/10/13 13:54	1
<b>Lead</b>	<b>0.22</b>	<b>J</b>	1.0	0.20	ug/L		04/10/13 08:12	04/10/13 13:54	1
<b>Antimony</b>	<b>8.2</b>		2.0	0.30	ug/L		04/10/13 08:12	04/10/13 13:54	1
<b>Selenium</b>	<b>1.5</b>	<b>J</b>	2.0	0.50	ug/L		04/10/13 08:12	04/10/13 13:54	1
Thallium	ND		1.0	0.20	ug/L		04/10/13 08:12	04/10/13 13:54	1
<b>Vanadium</b>	<b>77</b>		2.0	0.80	ug/L		04/10/13 08:12	04/10/13 13:54	1
<b>Zinc</b>	<b>8.6</b>	<b>J</b>	20	4.0	ug/L		04/10/13 08:12	04/10/13 13:54	1

## Method: 245.1 - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00010	mg/L		04/10/13 11:04	04/10/13 13:37	1

TestAmerica Pleasanton

# Client Sample Results

Client: Weiss Associates  
Project/Site: LRTC Storm Envent Inspection Sampling

TestAmerica Job ID: 720-48852-2

**Client Sample ID: LRTC-SW-04**

**Lab Sample ID: 720-48852-3**

**Date Collected: 04/04/13 09:05**

**Matrix: Water**

**Date Received: 04/04/13 17:00**

## Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.11	0.037	ug/L		04/10/13 08:47	04/10/13 20:59	1
Acenaphthylene	ND		0.11	0.037	ug/L		04/10/13 08:47	04/10/13 20:59	1
Anthracene	ND		0.11	0.031	ug/L		04/10/13 08:47	04/10/13 20:59	1
Benzo[a]anthracene	0.12		0.11	0.028	ug/L		04/10/13 08:47	04/10/13 20:59	1
Benzo[a]pyrene	0.085	J	0.11	0.024	ug/L		04/10/13 08:47	04/10/13 20:59	1
Benzo[b]fluoranthene	0.11		0.11	0.032	ug/L		04/10/13 08:47	04/10/13 20:59	1
Benzo[g,h,i]perylene	0.081	J	0.11	0.023	ug/L		04/10/13 08:47	04/10/13 20:59	1
Benzo[k]fluoranthene	ND		0.11	0.036	ug/L		04/10/13 08:47	04/10/13 20:59	1
Chrysene	0.14		0.11	0.033	ug/L		04/10/13 08:47	04/10/13 20:59	1
Dibenz[a,h]anthracene	0.039	J	0.11	0.027	ug/L		04/10/13 08:47	04/10/13 20:59	1
Fluoranthene	0.086	J	0.11	0.032	ug/L		04/10/13 08:47	04/10/13 20:59	1
Fluorene	ND		0.11	0.033	ug/L		04/10/13 08:47	04/10/13 20:59	1
Indeno[1,2,3-cd]pyrene	0.030	J	0.11	0.028	ug/L		04/10/13 08:47	04/10/13 20:59	1
Naphthalene	ND		0.11	0.032	ug/L		04/10/13 08:47	04/10/13 20:59	1
Phenanthrene	0.073	J	0.11	0.032	ug/L		04/10/13 08:47	04/10/13 20:59	1
Pyrene	0.11		0.11	0.037	ug/L		04/10/13 08:47	04/10/13 20:59	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	63		29 - 120				04/10/13 08:47	04/10/13 20:59	1
Terphenyl-d14	77		45 - 120				04/10/13 08:47	04/10/13 20:59	1

## Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		1.0	0.10	ug/L		04/10/13 08:12	04/10/13 13:56	1
Aluminum	ND		10	8.5	ug/L		04/10/13 08:12	04/10/13 13:56	1
Arsenic	ND		1.0	0.90	ug/L		04/10/13 08:12	04/10/13 13:56	1
Barium	120		1.0	0.30	ug/L		04/10/13 08:12	04/10/13 13:56	1
Beryllium	ND		0.50	0.10	ug/L		04/10/13 08:12	04/10/13 13:56	1
Cadmium	0.14	J	1.0	0.10	ug/L		04/10/13 08:12	04/10/13 13:56	1
Cobalt	0.19	J	1.0	0.10	ug/L		04/10/13 08:12	04/10/13 13:56	1
Chromium	2.1		2.0	0.90	ug/L		04/10/13 08:12	04/10/13 13:56	1
Copper	5.2		2.0	0.50	ug/L		04/10/13 08:12	04/10/13 13:56	1
Iron	20	B	20	8.0	ug/L		04/10/13 08:12	04/10/13 13:56	1
Molybdenum	4.1		2.0	0.20	ug/L		04/10/13 08:12	04/10/13 13:56	1
Nickel	0.89	J	2.0	0.50	ug/L		04/10/13 08:12	04/10/13 13:56	1
Lead	0.34	J	1.0	0.20	ug/L		04/10/13 08:12	04/10/13 13:56	1
Antimony	1.6	J	2.0	0.30	ug/L		04/10/13 08:12	04/10/13 13:56	1
Selenium	0.51	J	2.0	0.50	ug/L		04/10/13 08:12	04/10/13 13:56	1
Thallium	ND		1.0	0.20	ug/L		04/10/13 08:12	04/10/13 13:56	1
Vanadium	2.2		2.0	0.80	ug/L		04/10/13 08:12	04/10/13 13:56	1
Zinc	110		20	4.0	ug/L		04/10/13 08:12	04/10/13 13:56	1

## Method: 245.1 - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00010	mg/L		04/10/13 11:04	04/10/13 13:40	1

TestAmerica Pleasanton



# Client Sample Results

Client: Weiss Associates  
Project/Site: LRTC Storm Envent Inspection Sampling

TestAmerica Job ID: 720-48852-2

**Client Sample ID: LRTC-SW-05**

**Lab Sample ID: 720-48852-4**

Date Collected: 04/04/13 09:20

Matrix: Water

Date Received: 04/04/13 17:00

## Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.10	0.036	ug/L		04/10/13 08:47	04/11/13 14:08	1
Acenaphthylene	ND		0.10	0.036	ug/L		04/10/13 08:47	04/11/13 14:08	1
Anthracene	ND		0.10	0.030	ug/L		04/10/13 08:47	04/11/13 14:08	1
Benzo[a]anthracene	0.12		0.10	0.028	ug/L		04/10/13 08:47	04/11/13 14:08	1
Benzo[a]pyrene	0.098	J	0.10	0.023	ug/L		04/10/13 08:47	04/11/13 14:08	1
Benzo[b]fluoranthene	0.11		0.10	0.031	ug/L		04/10/13 08:47	04/11/13 14:08	1
Benzo[g,h,i]perylene	0.091	J	0.10	0.022	ug/L		04/10/13 08:47	04/11/13 14:08	1
Benzo[k]fluoranthene	ND		0.10	0.035	ug/L		04/10/13 08:47	04/11/13 14:08	1
Chrysene	0.15		0.10	0.032	ug/L		04/10/13 08:47	04/11/13 14:08	1
Dibenz[a,h]anthracene	0.039	J	0.10	0.027	ug/L		04/10/13 08:47	04/11/13 14:08	1
Fluoranthene	0.11		0.10	0.031	ug/L		04/10/13 08:47	04/11/13 14:08	1
Fluorene	ND		0.10	0.032	ug/L		04/10/13 08:47	04/11/13 14:08	1
Indeno[1,2,3-cd]pyrene	0.033	J	0.10	0.028	ug/L		04/10/13 08:47	04/11/13 14:08	1
Naphthalene	ND		0.10	0.031	ug/L		04/10/13 08:47	04/11/13 14:08	1
Phenanthrene	0.070	J	0.10	0.031	ug/L		04/10/13 08:47	04/11/13 14:08	1
Pyrene	0.11		0.10	0.036	ug/L		04/10/13 08:47	04/11/13 14:08	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	58		29 - 120				04/10/13 08:47	04/11/13 14:08	1
Terphenyl-d14	66		45 - 120				04/10/13 08:47	04/11/13 14:08	1

## Method: 200.8 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		1.0	0.10	ug/L		04/10/13 08:12	04/10/13 13:58	1
Aluminum	330		10	8.5	ug/L		04/10/13 08:12	04/10/13 13:58	1
Arsenic	1.2		1.0	0.90	ug/L		04/10/13 08:12	04/10/13 13:58	1
Barium	20		1.0	0.30	ug/L		04/10/13 08:12	04/10/13 13:58	1
Beryllium	ND		0.50	0.10	ug/L		04/10/13 08:12	04/10/13 13:58	1
Cadmium	0.33	J	1.0	0.10	ug/L		04/10/13 08:12	04/10/13 13:58	1
Cobalt	0.82	J	1.0	0.10	ug/L		04/10/13 08:12	04/10/13 13:58	1
Chromium	4.3		2.0	0.90	ug/L		04/10/13 08:12	04/10/13 13:58	1
Copper	10		2.0	0.50	ug/L		04/10/13 08:12	04/10/13 13:58	1
Iron	1400	B	20	8.0	ug/L		04/10/13 08:12	04/10/13 13:58	1
Molybdenum	5.0		2.0	0.20	ug/L		04/10/13 08:12	04/10/13 13:58	1
Nickel	3.2		2.0	0.50	ug/L		04/10/13 08:12	04/10/13 13:58	1
Lead	16		1.0	0.20	ug/L		04/10/13 08:12	04/10/13 13:58	1
Antimony	2.0		2.0	0.30	ug/L		04/10/13 08:12	04/10/13 13:58	1
Selenium	0.73	J	2.0	0.50	ug/L		04/10/13 08:12	04/10/13 13:58	1
Thallium	ND		1.0	0.20	ug/L		04/10/13 08:12	04/10/13 13:58	1
Vanadium	4.7		2.0	0.80	ug/L		04/10/13 08:12	04/10/13 13:58	1
Zinc	91		20	4.0	ug/L		04/10/13 08:12	04/10/13 13:58	1

## Method: 245.1 - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00010	mg/L		04/10/13 11:04	04/10/13 13:42	1

TestAmerica Pleasanton

# QC Sample Results

Client: Weiss Associates  
Project/Site: LRTC Storm Envent Inspection Sampling

TestAmerica Job ID: 720-48852-2

## Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Lab Sample ID: MB 720-134056/1-A

Matrix: Water

Analysis Batch: 134070

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 134056

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.10	0.035	ug/L		04/10/13 08:47	04/10/13 17:07	1
Acenaphthylene	ND		0.10	0.035	ug/L		04/10/13 08:47	04/10/13 17:07	1
Anthracene	ND		0.10	0.029	ug/L		04/10/13 08:47	04/10/13 17:07	1
Benzo[a]anthracene	ND		0.10	0.027	ug/L		04/10/13 08:47	04/10/13 17:07	1
Benzo[a]pyrene	ND		0.10	0.023	ug/L		04/10/13 08:47	04/10/13 17:07	1
Benzo[b]fluoranthene	ND		0.10	0.030	ug/L		04/10/13 08:47	04/10/13 17:07	1
Benzo[g,h,i]perylene	ND		0.10	0.022	ug/L		04/10/13 08:47	04/10/13 17:07	1
Benzo[k]fluoranthene	ND		0.10	0.034	ug/L		04/10/13 08:47	04/10/13 17:07	1
Chrysene	ND		0.10	0.031	ug/L		04/10/13 08:47	04/10/13 17:07	1
Dibenz(a,h)anthracene	ND		0.10	0.026	ug/L		04/10/13 08:47	04/10/13 17:07	1
Fluoranthene	ND		0.10	0.030	ug/L		04/10/13 08:47	04/10/13 17:07	1
Fluorene	ND		0.10	0.031	ug/L		04/10/13 08:47	04/10/13 17:07	1
Indeno[1,2,3-cd]pyrene	ND		0.10	0.027	ug/L		04/10/13 08:47	04/10/13 17:07	1
Naphthalene	ND		0.10	0.030	ug/L		04/10/13 08:47	04/10/13 17:07	1
Phenanthrene	ND		0.10	0.030	ug/L		04/10/13 08:47	04/10/13 17:07	1
Pyrene	ND		0.10	0.035	ug/L		04/10/13 08:47	04/10/13 17:07	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	72		29 - 120	04/10/13 08:47	04/10/13 17:07	1
Terphenyl-d14	91		45 - 120	04/10/13 08:47	04/10/13 17:07	1

Lab Sample ID: LCS 720-134056/2-A

Matrix: Water

Analysis Batch: 134070

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 134056

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	10.0	5.95		ug/L		59	42 - 120
Acenaphthylene	10.0	5.99		ug/L		60	39 - 120
Anthracene	10.0	8.41		ug/L		84	53 - 120
Benzo[a]anthracene	10.0	8.11		ug/L		81	48 - 120
Benzo[a]pyrene	10.0	7.64		ug/L		76	43 - 120
Benzo[b]fluoranthene	10.0	7.95		ug/L		79	42 - 120
Benzo[g,h,i]perylene	10.0	6.52		ug/L		65	24 - 120
Benzo[k]fluoranthene	10.0	6.95		ug/L		69	42 - 120
Chrysene	10.0	7.48		ug/L		75	52 - 120
Dibenz(a,h)anthracene	10.0	6.55		ug/L		66	21 - 120
Fluoranthene	10.0	8.92		ug/L		89	57 - 120
Fluorene	10.0	7.11		ug/L		71	45 - 120
Indeno[1,2,3-cd]pyrene	10.0	6.65		ug/L		66	25 - 120
Naphthalene	10.0	4.79		ug/L		48	39 - 120
Phenanthrene	10.0	7.80		ug/L		78	46 - 120
Pyrene	10.0	7.71		ug/L		77	47 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl	56		29 - 120
Terphenyl-d14	82		45 - 120

TestAmerica Pleasanton

# QC Sample Results

Client: Weiss Associates  
Project/Site: LRTC Storm Envent Inspection Sampling

TestAmerica Job ID: 720-48852-2

## Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: LCSD 720-134056/3-A

Matrix: Water

Analysis Batch: 134070

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 134056

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	10.0	6.77		ug/L		68	42 - 120	13	35
Acenaphthylene	10.0	7.30		ug/L		73	39 - 120	20	35
Anthracene	10.0	9.02		ug/L		90	53 - 120	7	35
Benzo[a]anthracene	10.0	8.95		ug/L		90	48 - 120	10	35
Benzo[a]pyrene	10.0	8.51		ug/L		85	43 - 120	11	35
Benzo[b]fluoranthene	10.0	9.16		ug/L		92	42 - 120	14	35
Benzo[g,h,i]perylene	10.0	7.36		ug/L		74	24 - 120	12	35
Benzo[k]fluoranthene	10.0	7.58		ug/L		76	42 - 120	9	35
Chrysene	10.0	8.24		ug/L		82	52 - 120	10	35
Dibenz(a,h)anthracene	10.0	7.39		ug/L		74	21 - 120	12	35
Fluoranthene	10.0	9.59		ug/L		96	57 - 120	7	35
Fluorene	10.0	8.06		ug/L		81	45 - 120	12	35
Indeno[1,2,3-cd]pyrene	10.0	7.50		ug/L		75	25 - 120	12	35
Naphthalene	10.0	5.36		ug/L		54	39 - 120	11	35
Phenanthrene	10.0	8.41		ug/L		84	46 - 120	8	35
Pyrene	10.0	8.49		ug/L		85	47 - 120	10	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
2-Fluorobiphenyl	61		29 - 120
Terphenyl-d14	91		45 - 120

## Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 440-97262/1-A

Matrix: Water

Analysis Batch: 97390

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 97262

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		1.0	0.10	ug/L		04/10/13 08:12	04/10/13 13:43	1
Aluminum	ND		10	8.5	ug/L		04/10/13 08:12	04/10/13 13:43	1
Arsenic	ND		1.0	0.90	ug/L		04/10/13 08:12	04/10/13 13:43	1
Barium	ND		1.0	0.30	ug/L		04/10/13 08:12	04/10/13 13:43	1
Beryllium	ND		0.50	0.10	ug/L		04/10/13 08:12	04/10/13 13:43	1
Cadmium	ND		1.0	0.10	ug/L		04/10/13 08:12	04/10/13 13:43	1
Cobalt	ND		1.0	0.10	ug/L		04/10/13 08:12	04/10/13 13:43	1
Chromium	ND		2.0	0.90	ug/L		04/10/13 08:12	04/10/13 13:43	1
Copper	ND		2.0	0.50	ug/L		04/10/13 08:12	04/10/13 13:43	1
Iron	9.97	J	20	8.0	ug/L		04/10/13 08:12	04/10/13 13:43	1
Molybdenum	ND		2.0	0.20	ug/L		04/10/13 08:12	04/10/13 13:43	1
Nickel	ND		2.0	0.50	ug/L		04/10/13 08:12	04/10/13 13:43	1
Lead	ND		1.0	0.20	ug/L		04/10/13 08:12	04/10/13 13:43	1
Antimony	ND		2.0	0.30	ug/L		04/10/13 08:12	04/10/13 13:43	1
Selenium	ND		2.0	0.50	ug/L		04/10/13 08:12	04/10/13 13:43	1
Thallium	ND		1.0	0.20	ug/L		04/10/13 08:12	04/10/13 13:43	1
Vanadium	ND		2.0	0.80	ug/L		04/10/13 08:12	04/10/13 13:43	1
Zinc	ND		20	4.0	ug/L		04/10/13 08:12	04/10/13 13:43	1

TestAmerica Pleasanton

# QC Sample Results

Client: Weiss Associates  
Project/Site: LRTC Storm Envent Inspection Sampling

TestAmerica Job ID: 720-48852-2

## Method: 200.8 - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 440-97262/2-A

Matrix: Water

Analysis Batch: 97390

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 97262

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	80.0	84.7		ug/L		106	85 - 115
Aluminum	80.0	89.2		ug/L		112	85 - 115
Arsenic	80.0	82.7		ug/L		103	85 - 115
Barium	80.0	84.3		ug/L		105	85 - 115
Beryllium	80.0	85.5		ug/L		107	85 - 115
Cadmium	80.0	83.7		ug/L		105	85 - 115
Cobalt	80.0	81.7		ug/L		102	85 - 115
Chromium	80.0	83.5		ug/L		104	85 - 115
Copper	80.0	83.2		ug/L		104	85 - 115
Iron	800	831		ug/L		104	85 - 115
Molybdenum	80.0	85.0		ug/L		106	85 - 115
Nickel	80.0	82.0		ug/L		102	85 - 115
Lead	80.0	81.2		ug/L		102	85 - 115
Antimony	80.0	84.4		ug/L		106	85 - 115
Selenium	80.0	81.6		ug/L		102	85 - 115
Thallium	80.0	82.2		ug/L		103	85 - 115
Vanadium	80.0	83.5		ug/L		104	85 - 115
Zinc	80.0	82.6		ug/L		103	85 - 115

Lab Sample ID: 720-48852-1 MS

Matrix: Water

Analysis Batch: 97390

Client Sample ID: LRTC-SW-02

Prep Type: Dissolved

Prep Batch: 97262

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	ND		80.0	81.6		ug/L		102	70 - 130
Aluminum	25		80.0	103		ug/L		98	70 - 130
Arsenic	0.93	J	80.0	82.1		ug/L		102	70 - 130
Barium	9.8		80.0	92.4		ug/L		103	70 - 130
Beryllium	ND		80.0	85.2		ug/L		106	70 - 130
Cadmium	ND		80.0	80.9		ug/L		101	70 - 130
Cobalt	0.12	J	80.0	79.4		ug/L		99	70 - 130
Chromium	2.9		80.0	84.3		ug/L		102	70 - 130
Copper	1.9	J	80.0	82.7		ug/L		101	70 - 130
Iron	29	B	800	840		ug/L		101	70 - 130
Molybdenum	5.0		80.0	89.5		ug/L		106	70 - 130
Nickel	1.1	J	80.0	79.4		ug/L		98	70 - 130
Lead	0.21	J	80.0	78.3		ug/L		98	70 - 130
Antimony	7.6		80.0	91.1		ug/L		104	70 - 130
Selenium	0.78	J	80.0	77.7		ug/L		96	70 - 130
Thallium	ND		80.0	79.7		ug/L		100	70 - 130
Vanadium	66		80.0	144		ug/L		97	70 - 130
Zinc	5.7	J	80.0	84.8		ug/L		99	70 - 130

TestAmerica Pleasanton

# QC Sample Results

Client: Weiss Associates  
Project/Site: LRTC Storm Envent Inspection Sampling

TestAmerica Job ID: 720-48852-2

## Method: 200.8 - Metals (ICP/MS) (Continued)

Lab Sample ID: 720-48852-1 MSD

Matrix: Water

Analysis Batch: 97390

Client Sample ID: LRTC-SW-02

Prep Type: Dissolved

Prep Batch: 97262

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Silver	ND		80.0	82.1		ug/L		103	70 - 130	1	20
Aluminum	25		80.0	106		ug/L		102	70 - 130	3	20
Arsenic	0.93	J	80.0	83.1		ug/L		103	70 - 130	1	20
Barium	9.8		80.0	92.6		ug/L		104	70 - 130	0	20
Beryllium	ND		80.0	85.2		ug/L		107	70 - 130	0	20
Cadmium	ND		80.0	81.9		ug/L		102	70 - 130	1	20
Cobalt	0.12	J	80.0	79.8		ug/L		100	70 - 130	0	20
Chromium	2.9		80.0	84.0		ug/L		101	70 - 130	0	20
Copper	1.9	J	80.0	82.5		ug/L		101	70 - 130	0	20
Iron	29	B	800	827		ug/L		100	70 - 130	2	20
Molybdenum	5.0		80.0	88.8		ug/L		105	70 - 130	1	20
Nickel	1.1	J	80.0	80.5		ug/L		99	70 - 130	1	20
Lead	0.21	J	80.0	77.8		ug/L		97	70 - 130	1	20
Antimony	7.6		80.0	91.5		ug/L		105	70 - 130	1	20
Selenium	0.78	J	80.0	79.2		ug/L		98	70 - 130	2	20
Thallium	ND		80.0	79.2		ug/L		99	70 - 130	1	20
Vanadium	66		80.0	145		ug/L		98	70 - 130	0	20
Zinc	5.7	J	80.0	85.1		ug/L		99	70 - 130	0	20

## Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 440-97068/1-C

Matrix: Water

Analysis Batch: 97393

Client Sample ID: Method Blank

Prep Type: Dissolved

Prep Batch: 97320

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00010	mg/L		04/10/13 11:04	04/10/13 13:25	1

Lab Sample ID: LCS 440-97068/2-C

Matrix: Water

Analysis Batch: 97393

Client Sample ID: Lab Control Sample

Prep Type: Dissolved

Prep Batch: 97320

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00800	0.00814		mg/L		102	85 - 115

Lab Sample ID: 720-48852-1 MS

Matrix: Water

Analysis Batch: 97393

Client Sample ID: LRTC-SW-02

Prep Type: Dissolved

Prep Batch: 97320

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	ND		0.00800	0.00821		mg/L		103	70 - 130

Lab Sample ID: 720-48852-1 MSD

Matrix: Water

Analysis Batch: 97393

Client Sample ID: LRTC-SW-02

Prep Type: Dissolved

Prep Batch: 97320

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	ND		0.00800	0.00811		mg/L		101	70 - 130	1	20

TestAmerica Pleasanton

# QC Association Summary

Client: Weiss Associates  
Project/Site: LRTC Storm Envent Inspection Sampling

TestAmerica Job ID: 720-48852-2

## GC/MS Semi VOA

### Prep Batch: 134056

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-48852-1	LRTC-SW-02	Dissolved	Water	3510C	
720-48852-2	LRTC-SW-03	Dissolved	Water	3510C	
720-48852-3	LRTC-SW-04	Dissolved	Water	3510C	
720-48852-4	LRTC-SW-05	Dissolved	Water	3510C	
LCS 720-134056/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 720-134056/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
MB 720-134056/1-A	Method Blank	Total/NA	Water	3510C	

### Analysis Batch: 134070

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-48852-1	LRTC-SW-02	Dissolved	Water	8270C SIM	134056
720-48852-2	LRTC-SW-03	Dissolved	Water	8270C SIM	134056
720-48852-3	LRTC-SW-04	Dissolved	Water	8270C SIM	134056
LCS 720-134056/2-A	Lab Control Sample	Total/NA	Water	8270C SIM	134056
LCSD 720-134056/3-A	Lab Control Sample Dup	Total/NA	Water	8270C SIM	134056
MB 720-134056/1-A	Method Blank	Total/NA	Water	8270C SIM	134056

### Analysis Batch: 134167

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-48852-4	LRTC-SW-05	Dissolved	Water	8270C SIM	134056

## Metals

### Prep Batch: 97262

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-48852-1	LRTC-SW-02	Dissolved	Water	200.2	
720-48852-1 MS	LRTC-SW-02	Dissolved	Water	200.2	
720-48852-1 MSD	LRTC-SW-02	Dissolved	Water	200.2	
720-48852-2	LRTC-SW-03	Dissolved	Water	200.2	
720-48852-3	LRTC-SW-04	Dissolved	Water	200.2	
720-48852-4	LRTC-SW-05	Dissolved	Water	200.2	
LCS 440-97262/2-A	Lab Control Sample	Total Recoverable	Water	200.2	
MB 440-97262/1-A	Method Blank	Total Recoverable	Water	200.2	

### Prep Batch: 97320

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-48852-1	LRTC-SW-02	Dissolved	Water	245.1	
720-48852-1 MS	LRTC-SW-02	Dissolved	Water	245.1	
720-48852-1 MSD	LRTC-SW-02	Dissolved	Water	245.1	
720-48852-2	LRTC-SW-03	Dissolved	Water	245.1	
720-48852-3	LRTC-SW-04	Dissolved	Water	245.1	
720-48852-4	LRTC-SW-05	Dissolved	Water	245.1	
LCS 440-97068/2-C	Lab Control Sample	Dissolved	Water	245.1	
MB 440-97068/1-C	Method Blank	Dissolved	Water	245.1	

### Analysis Batch: 97390

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-48852-1	LRTC-SW-02	Dissolved	Water	200.8	97262
720-48852-1 MS	LRTC-SW-02	Dissolved	Water	200.8	97262
720-48852-1 MSD	LRTC-SW-02	Dissolved	Water	200.8	97262

TestAmerica Pleasanton

## QC Association Summary

Client: Weiss Associates  
Project/Site: LRTC Storm Envent Inspection Sampling

TestAmerica Job ID: 720-48852-2

### Metals (Continued)

#### Analysis Batch: 97390 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-48852-2	LRTC-SW-03	Dissolved	Water	200.8	97262
720-48852-3	LRTC-SW-04	Dissolved	Water	200.8	97262
720-48852-4	LRTC-SW-05	Dissolved	Water	200.8	97262
LCS 440-97262/2-A	Lab Control Sample	Total Recoverable	Water	200.8	97262
MB 440-97262/1-A	Method Blank	Total Recoverable	Water	200.8	97262

#### Analysis Batch: 97393

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-48852-1	LRTC-SW-02	Dissolved	Water	245.1	97320
720-48852-1 MS	LRTC-SW-02	Dissolved	Water	245.1	97320
720-48852-1 MSD	LRTC-SW-02	Dissolved	Water	245.1	97320
720-48852-2	LRTC-SW-03	Dissolved	Water	245.1	97320
720-48852-3	LRTC-SW-04	Dissolved	Water	245.1	97320
720-48852-4	LRTC-SW-05	Dissolved	Water	245.1	97320
LCS 440-97068/2-C	Lab Control Sample	Dissolved	Water	245.1	97320
MB 440-97068/1-C	Method Blank	Dissolved	Water	245.1	97320

# Lab Chronicle

Client: Weiss Associates  
Project/Site: LRTC Storm Envent Inspection Sampling

TestAmerica Job ID: 720-48852-2

**Client Sample ID: LRTC-SW-02**

**Date Collected: 04/04/13 07:55**

**Date Received: 04/04/13 17:00**

**Lab Sample ID: 720-48852-1**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3510C			134056	04/10/13 08:47	AM	TAL PLS
Dissolved	Analysis	8270C SIM		1	134070	04/10/13 20:12	ML	TAL PLS
Dissolved	Prep	200.2			97262	04/10/13 08:12	DT	TAL IRV
Dissolved	Analysis	200.8		1	97390	04/10/13 13:47	NH	TAL IRV
Dissolved	Prep	245.1			97320	04/10/13 11:04	MM	TAL IRV
Dissolved	Analysis	245.1		1	97393	04/10/13 13:30	DB	TAL IRV

**Client Sample ID: LRTC-SW-03**

**Date Collected: 04/04/13 08:35**

**Date Received: 04/04/13 17:00**

**Lab Sample ID: 720-48852-2**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3510C			134056	04/10/13 08:47	AM	TAL PLS
Dissolved	Analysis	8270C SIM		1	134070	04/10/13 20:36	ML	TAL PLS
Dissolved	Prep	200.2			97262	04/10/13 08:12	DT	TAL IRV
Dissolved	Analysis	200.8		1	97390	04/10/13 13:54	NH	TAL IRV
Dissolved	Prep	245.1			97320	04/10/13 11:04	MM	TAL IRV
Dissolved	Analysis	245.1		1	97393	04/10/13 13:37	DB	TAL IRV

**Client Sample ID: LRTC-SW-04**

**Date Collected: 04/04/13 09:05**

**Date Received: 04/04/13 17:00**

**Lab Sample ID: 720-48852-3**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3510C			134056	04/10/13 08:47	AM	TAL PLS
Dissolved	Analysis	8270C SIM		1	134070	04/10/13 20:59	ML	TAL PLS
Dissolved	Prep	200.2			97262	04/10/13 08:12	DT	TAL IRV
Dissolved	Analysis	200.8		1	97390	04/10/13 13:56	NH	TAL IRV
Dissolved	Prep	245.1			97320	04/10/13 11:04	MM	TAL IRV
Dissolved	Analysis	245.1		1	97393	04/10/13 13:40	DB	TAL IRV

**Client Sample ID: LRTC-SW-05**

**Date Collected: 04/04/13 09:20**

**Date Received: 04/04/13 17:00**

**Lab Sample ID: 720-48852-4**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3510C			134056	04/10/13 08:47	AM	TAL PLS
Dissolved	Analysis	8270C SIM		1	134167	04/11/13 14:08	ML	TAL PLS
Dissolved	Prep	200.2			97262	04/10/13 08:12	DT	TAL IRV
Dissolved	Analysis	200.8		1	97390	04/10/13 13:58	NH	TAL IRV
Dissolved	Prep	245.1			97320	04/10/13 11:04	MM	TAL IRV
Dissolved	Analysis	245.1		1	97393	04/10/13 13:42	DB	TAL IRV

TestAmerica Pleasanton



Lab Chronicle

Client: Weiss Associates  
Project/Site: LRTC Storm Envent Inspection Sampling

TestAmerica Job ID: 720-48852-2

**Laboratory References:**  
TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022  
TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

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## Certification Summary

Client: Weiss Associates  
Project/Site: LRTC Storm Envent Inspection Sampling

TestAmerica Job ID: 720-48852-2

### Laboratory: TestAmerica Pleasanton

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	State Program	9	2496	01-31-14

### Laboratory: TestAmerica Irvine

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska	State Program	10	CA01531	06-30-13
Arizona	State Program	9	AZ0671	10-13-13
California	LA Cty Sanitation Districts	9	10256	01-31-14
California	NELAP	9	1108CA	01-31-14
California	State Program	9	2706	06-30-14
Guam	State Program	9	Cert. No. 12.002r	03-28-13 *
Hawaii	State Program	9	N/A	01-31-14
Nevada	State Program	9	CA015312007A	07-31-13
Northern Mariana Islands	State Program	9	MP0002	01-31-14
Oregon	NELAP	10	4005	09-12-13
USDA	Federal		P330-09-00080	06-06-14
USEPA UCMR	Federal	1	CA01531	01-31-15

\* Expired certification is currently pending renewal and is considered valid.

TestAmerica Pleasanton

## Method Summary

Client: Weiss Associates

TestAmerica Job ID: 720-48852-2

Project/Site: LRTC Storm Envent Inspection Sampling

Method	Method Description	Protocol	Laboratory
8270C SIM	Semivolatile Organic Compounds (GC/MS SIM)	SW846	TAL PLS
200.8	Metals (ICP/MS)	EPA	TAL IRV
245.1	Mercury (CVAA)	EPA	TAL IRV

### Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

### Laboratory References:

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

## Sample Summary

Client: Weiss Associates

TestAmerica Job ID: 720-48852-2

Project/Site: LRTC Storm Envent Inspection Sampling

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
720-48852-1	LRTC-SW-02	Water	04/04/13 07:55	04/04/13 17:00
720-48852-2	LRTC-SW-03	Water	04/04/13 08:35	04/04/13 17:00
720-48852-3	LRTC-SW-04	Water	04/04/13 09:05	04/04/13 17:00
720-48852-4	LRTC-SW-05	Water	04/04/13 09:20	04/04/13 17:00

720-48852



195188

## Chain of Custody Record

**TestAmerica**  
1220 Quarry Lane  
Pleasanton, CA 94566  
Phone: 925-484-1919 ext.137

Please send analytic results, electronic deliverables and the original chain-of-custody form to:

**labresults@weiss.com**  
**gch@weiss.com**  
**sab@weiss.com**

INSTRUCTIONS FOR LAB PERSONNEL:

GeoTracker EDF required? ☐ Yes ☒ No

Equis 4-16 EDWEDD required? ☒ Yes ☐ No

Specify analytic/prep method and detection limit in report.

Notify us of any anomalous peaks in GC or other scans immediately with any questions or problems.

Weiss Associates



4/12/2013

[illegible]

Smith, Micah

**720-48852**

**From:** Greg Hulburd [gch@weiss.com]  
**Sent:** Monday, April 08, 2013 3:31 PM  
**To:** Smith, Micah  
**Subject:** LRTC samples from 4/4/2013

Micah-

Just following up on our conversation from last Friday. Is the holding time for the particle size test going to be an issue?

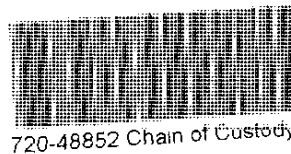
Regarding the instruction on the COC:

- 1- Please proceed with samples LRTC-SW-03 and LRTC-SW-04 (they were marked "Hold" on the COC).  
2- Please continue to hold sample LRTC-SW-05A.

Thank you,

Greg

Greg Hulburd  
Weiss Associates  
2200 Powell Street, Suite 925  
Emeryville, California 94608  
tel: 510.450.6159  
[gch@weiss.com](mailto:gch@weiss.com)



## Login Sample Receipt Checklist

Client: Weiss Associates

Job Number: 720-48852-2

Login Number: 48852

List Source: TestAmerica Pleasanton

List Number: 1

Creator: Bullock, Tracy

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	False	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

## Login Sample Receipt Checklist

Client: Weiss Associates

Job Number: 720-48852-2

**Login Number: 48852**

**List Source: TestAmerica Irvine**

**List Number: 1**

**List Creation: 04/09/13 12:40 PM**

**Creator: Soderblom, Tim**

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	N/A	
Samples do not require splitting or compositing.	N/A	
Residual Chlorine Checked.	N/A	